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ANNUAL DEPARTMENTAL REPORTS

1928-29

VOL. II

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OTTAWA
F. A. ACLAND
PRINTER TO THE KING'S MOST EXCELLENT MAJESTY
1930

ANNUAL DEPARTMENTAL REPORTS

VOLUME I

Auditor General, for the fiscal year ended March 31, 1929.

VOLUME II

Public Accounts, for the fiscal year ended March 31, 1929.

National Revenue, Department of, (Customs and Excise), containing accounts of Revenue with statements relative to the Imports, Exports, and Excise of the Dominion of Canada, for the fiscal year ended March 31, 1929.

National Revenue, Department of, (Shipping Report, Customs), containing the Statements of Navigation and Shipping for the fiscal year ended March 31, 1929.

Trade and Commerce, Department of, for the fiscal year ended March 31, 1929.

Weights and Measures Inspection Service (Trade and Commerce), for the fiscal year ended March 31, 1929.

Electricity and Gas Inspection Services (Trade and Commerce), for the fiscal year ended March 31, 1929.

Board of Grain Commissioners for Canada (Trade and Commerce), for the crop year ended August 31, 1929.

Interior, Department of the, for the fiscal year ended March 31, 1929.

Immigration and Colonization, Department of, for the fiscal year ended March 31, 1929.

Indian Affairs, Department of, for the fiscal year ended March 31, 1929.

Mines, Department of, for the fiscal year ended March 31, 1929.

Agriculture, Department of, for the fiscal year ended March 31, 1929.

National Defence, Department of, (Militia and Air Service), for the fiscal year ended March 31, 1929.

National Defence, Department of, (Naval Service), for the fiscal year ended March 31, 1929.

Pensions and National Health, Department of, for the fiscal year ended March 31, 1929

VOLUME III

Superintendent of Penitentiaries, for the fiscal year ended March 31, 1929.

Royal Canadian Mounted Police, for the year ended September 30, 1929.

Secretary of State, Department of the, for the fiscal year ended March 31, 1929.

Commissioner of Patents, for the fiscal year ended March 31, 1929.

Archives, for the year 1929.

Civil Service Commission, for the calendar year ended December 31, 1929.

External Affairs, Department of the Secretary of State for, for the fiscal year ended March 31, 1929.

Labour, Department of, for the fiscal year ended March 31, 1929.

VOLUME IV

Public Printing and Stationery, Department of, for the fiscal year ended March 31, 1929.

Marine and Fisheries (Marine), Department of, for the fiscal year ended March 31, 1929.

Marine and Fisheries (Fisheries), Department of, for the fiscal year ended March 31, 1929.

Post Office, Department of the, for the fiscal year ended March 31, 1929.

Public Works, Department of, for the fiscal year ended March 31, 1929.

Railways and Canals, Department of, for the fiscal year ended March 31, 1929.

Board of Railway Commissioners for Canada, for the calendar year ended December 31, 1929.

Chief Electoral Officer (By-elections for the year 1929).

VOLUME V

Trade of Canada (Imports for Consumption and Exports), for the fiscal year ended March 31, 1929.

CANADA

PUBLIC ACCOUNTS

FOR THE

FISCAL YEAR ENDED MARCH 31,

1929

OTTAWA
F. A. ACLAND
PRINTER TO THE KING'S MOST EXCELLENT MAJESTY
1930

To His Excellency the Right Honourable Freeman Viscount Willingdon, G.C.S.I., G.C.M.G., G.C.I.E., G.B.E., Governor General and Commander in Chief of the Dominion of Canada.

MAY IT PLEASE YOUR EXCELLENCY,—

The undersigned has the honour to present to Your Excellency the Public Accounts of Canada for the Fiscal Year ended March 31, 1929.

All of which is respectfully submitted.

C. A. DUNNING,
Minister of Finance.

OTTAWA, January 10, 1930.

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DEPARTMENT OF FINANCE,

OTTAWA, January 10, 1930.

Hon. C. A. DUNNING,
Minister of Finance.

SIR,—I have the honour to submit to you the Public Accounts of Canada for the fiscal year ended March 31, 1929.

ORDINARY RECEIPTS AND PAYMENTS

The receipts for the year on account of Consolidated Fund amounted to $455,463,873.74, and the expenditure on the same account to $350,952,924.03, showing a surplus of ordinary receipts over ordinary expenditures of $104,510,949.71.

SPECIAL RECEIPTS AND EXPENDITURES

In addition to the ordinary receipts and payments there were special receipts of $5,476,854.04 and special expenditures of $2,187,000.80, leaving an excess of $3,289,853.24 of receipts over the expenditures as a credit to Consolidated Fund:—

Special Receipts—

War and Demobilization Receipts—		
Refunds of Previous Year's Expenditure	$ 789,246 80	
Payments received on account of Reparations from Germany—Under the Dawes Plan	4,025,165 12	
Amount received from the British Treasury in final settlement of outstanding claims and counter claims arising out of War	662,442 12	
		$ 5,476,854 04

Special Expenditures—

Adjustment of War Claims	$ 119,847 74	
Cost of Loan Flotations	11,330 21	
Home Bank Depositors' Relief Act	17,108 95	
Civil Service Superannuation Act, 1924 (Government contribution to the Fund)	1,681,700 44	
Government Annuities—Amount required to meet the value of the prospective annuities contracted for up to the end of the fiscal year 1929	132,844 13	
Railway Grade Crossing Fund	224,169 33	
		$ 2,187,000 80
Excess of Special Receipts over Special Expenditures		$ 3,289,853 24

CAPITAL ACCOUNT

The following outlays were made during the year and charged to Capital:—

CANALS (SCHEDULE GG)—		
Trent Canal	9,164 54	
Welland Ship Canal	13,670,899 26	
		$ 13,680,063 80
RAILWAYS (SCHEDULE II)—		
Canadian Government Railways—Exchequer Court Awards	5,728 80	
Canadian Government Railways—Prince Edward Island Car Ferry	172,862 35	
Hudson Bay Railway	6,271,257 43	
		6,449,848 58
Total Railways and Canals		$ 20,129,912 38
PUBLIC WORKS (SCHEDULE HH)—		
Ottawa—New Departmental Building	$ 185,101 95	
Ottawa—Parliament Building	82,634 98	
Ottawa—Expropriation of property between Sparks and Wellington Streets east of Elgin Street	278,869 40	
Ottawa—National Research Council Laboratories	92,699 52	
Esquimalt, B.C.—New Dry Dock	82,950 08	
Port Arthur and Fort William Harbours	145,829 56	
Quebec Harbour	58,798 37	
Sorel Harbour	299,873 90	
St. John Harbour	8,859 79	
Toronto Harbour	13,382 65	
St. Lawrence River Improvements—		
Ship Channel Dredging	1,894,911 65	
Sorel Shipyard	168,644 08	
Lower Lakes Terminals	73,102 50	
		$ 3,385,658 43
Total Capital Expenditure		$ 23,515,570 81

The following refunds of previous years' expenditure were received and credited to Capital Account:—

CANALS—		
Lachine Canal	$ 55,398 00	
Welland Canal	443 31	
Welland Ship Canal	459,640 23	
		$ 515,481 54
RAILWAYS—		
Canadian Government Railways—Sale of SS. *Drummond* and *McKee*	36,000 00	
Canadian Government Railways	175 00	
Hudson Bay Railway	111,694 48	
		147,869 48

CAPITAL ACCOUNT—*Concluded*

PUBLIC WORKS—		
Ottawa—National Research Council Laboratories	$ 150 00	
Esquimalt—Construction of Dry Dock	119 70	
Sorel Shipyard	2,584 96	
Toronto Harbour	2,090 00	
Government Shipbuilding Program—Sale of Ships	38,000 00	
		42,944 66
		$ 706,295 68
Net charge to Capital Account		$ 22,809,275 13

LOANS TO MERCHANT MARINE

Loans to the Canadian Government Merchant Marine, Limited, of $758,000.00, were made under authority of the Appropriation Act of 1928.

DEBT

The net debt of the Dominion at the close of the fiscal year was $2,225,504,705.10 or a decrease of $71,345,527.82 under the debt as it stood on March 31, 1928.

The decrease is accounted for as follows:—

REVENUES—		
Ordinary Revenue	$455,463,873 74	
Special Receipts	5,476,854 04	
		$460,940,727 78
EXPENDITURES—		
Ordinary Expenditure	$350,952,924 03	
Special Expenditure	2,187,000 80	
Capital Expenditure (net)	22,809,275 13	
Loans to Canadian Government Merchant Marine, Limited	758,000 00	
Loan to Quebec Harbour Commissioners	2,888,000 00	
		$379,595,199 96
Surplus of Revenues over Expenditures		$ 81,345,527 82
SOLDIER SETTLEMENT BOARD LOANS—		
Additional amount transferred to non-active assets to provide for revaluations and losses		10,000,000 00
Net Decrease of Debt		$ 71,345,527 82

During the year certain Railway properties at St. John and Halifax valued at $13,475,304.93 were transferred to St. John and Halifax Harbour Commissions, as follows:—

St. John Harbour Commission..... Transferred under authority of Chapter 67, Statutes of Canada 1926-27 and Order in Council, P.C. 451 dated March 22, 1929.	$ 645,182 77
Halifax Harbour Commission..... Transferred under authority of Chapter 58, Statutes of Canada 1926-27 and Order in Council, P.C. 1456 dated August 16, 1928.	12,830,122 16

These properties were originally charged to Canadian Government Railways $5,484,564.64 and Intercolonial Railway $7,990,740.29.

FUNDED DEBT

The 5 per cent Refunding Loan of 1923 amounting to $46,496,400 matured October 15, 1928 and was redeemed.

In addition to the above maturity $5,422,200 of the 5½ per cent New York Loan due August 1, 1929, was redeemed in advance of the due date by purchase in the open market.

SAVINGS BANK

At the close of the fiscal year, the balance at the credit of depositors in the Post Office Savings Bank was $28,375,769.74, a decrease of $2,728,006.52 under the balance held on March 31, 1928. The withdrawals for the year exceeded the deposits by $3,611,312.44 while $883,305.92 was added for interest accrued.

INVESTMENTS

Sinking Funds

Investments on account of Sinking Funds of the various loans were made during the year to the amount of $3,462,312.33. The total of the investments at the credit of the Sinking Funds, which stood at $48,616,885.97 on March 31, 1928, was therefore increased to $52,079,198.30 on March 31, 1929.

Advances to Harbour Commissioners

Advances were made under statute to the following Harbour Commissioners:—

Montreal Harbour Commissioners.....	$1,370,000 00
Quebec Harbour Commissioners.....	2,888,000 00
Vancouver Harbour Commissioners.....	1,596,000 00
Halifax Harbour Commissioners.....	30,000 00
St. John Harbour Commissioners.....	602,000 00
Chicoutimi Harbour Commissioners.....	500,000 00
	$6,986,000 00

Loans to Banks

Under authority of the Finance Act, Chapter 70, R.S.C. 1927, advances during the year to an aggregate amount of $490,380,000 were made by way of issues of Dominion Notes to various banks. On April 1, 1928 the outstanding balance on this account was $36,000,000. During the year repayments were received to the amount of $442,880,000, leaving a balance of $83,500,000 outstanding at the close of the year.

Soldier Land Settlement Board

The Loans outstanding to soldiers settling on the land and for General Land Settlement decreased during the year by $3,887,888.52, of which $2,653,262.64 represents amount written off to Consolidated Fund on account of the revaluation of loans to soldier settlers. This leaves a balance outstanding at the close of the year of $79,457,982.73 of which $58,175,573.28 is carried as an Active Asset. The balance $21,282,409.45 is carried as a Non-Active Asset.

Housing Loans

The Provincial Governments reduced their indebtedness to the Dominion on account of Housing Loans by $275,200 as follows:—

Province of Manitoba	$ 60,000 00
Province of New Brunswick	52,000 00
Province of Nova Scotia	150,000 00
Province of Quebec	13,200 00
	$275,200 00

Foreign Governments

Foreign Governments have paid all interest due on their obligations. The Government of Greece, under agreement, paid $200,000 on account of principal. The outstanding foreign debts are thus reduced to $7,080,000 owing by Greece and $23,969,720 owing by Roumania.

DOMINION NOTES

The circulation of Dominion Notes stood at $204,501,216.54 on March 31, 1929, being an increase of $15,869,726.93 as compared with the circulation at the close of the last year. Gold held as security amounted to $58,067,768.15. Of the total amount of Notes outstanding, $83,500,000 were against approved securities held by the Department under the Finance Act.

GUARANTEED SECURITIES

Canadian National Railway Company:

An issue of $35,000,000 Canadian National Railway Company 4½ per cent 40-Year Gold Bonds dated December 1, 1928, was guaranteed as to principal and interest. The bonds were sold to the Chase Securities Corporation, Blair and Company Inc., and the Equitable Trust Company of New York, at a price of 94.15 and accrued interest. The issue was authorized as follows:—

$21,500,000—under authority of Appropriation Act No. 3, Chapter 54, of the Statutes of Canada 1928, vote 408.

$13,500,000—under authority of the Special Acts relating to the construction of the Toronto Terminals and various branch lines.

Under authority of the Canadian Northern Railway Company Income Charge Act 1928, a temporary bond of the Canadian National Railway Company for $23,500,000, 4½ per cent, payable on demand, was guaranteed as to principal and interest in connection with arrangements for the redemption of Canadian Northern Railway Company 5 per cent income charge debenture stock. Pending the public issue of guaranteed securities, $22,748,109.60 was outstanding at March 31, 1929, in the form of temporary bank loans.

Harbour Commissions:

Under authority of Chapter 58 of the Statutes of 1924 a 4¾ per cent interim debenture of the Harbour Commissioners of Montreal for $4,000,000, and a 5½ per cent interim debenture of the Harbour Commissioners of Montreal for $5,000,000, were issued and guaranteed as to principal and interest. These debentures were pledged by the Commissioners as collateral for temporary financing with the Royal Bank of Canada, bringing the total issue to date for construction of the South Shore Bridge to $17,000,000

Respectfully submitted,

J. C. SAUNDERS,
Deputy Minister of Finance.

BALANCE SHEET

REVENUE AND EXPENDITURE

CONDENSED CASH STATEMENT

SCHEDULES

COMPARATIVE TABLES

APPENDICES

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THE DOMINION

BALANCE SHEET

ASSETS—	$ cts.
Cash	82,410,884 61
Specie Reserve	60,791,333 69
Advances to Provinces, Banks, etc., per schedule A	166,080,669 33
Advances to Foreign Governments, per schedule B	31,049,720 00
Soldier and General Land Settlement Loans per schedule C	58,175,573 28
Miscellaneous Current Accounts, per schedule D	23,021,087 31
Balance being Net Debt March 31, 1929 (exclusive of interest accrued and outstanding) carried forward	2,225,504,705 10
	2,647,033,973 32

Balance Net Debt represented by:—		
(A) Expenditure—		
Public Works, Canals, per schedule E.	$214,612,601 26	
Public Works, Railways, per schedule F.	422,656,794 10	
Public Works, Miscellaneous, per schedule G	217,315,901 06	
Military Property and Stores, per schedule H	12,034,169 85	
Territorial Accounts, per schedule I	9,895,947 68	
Railway Accounts (old), per schedule J.	88,398,828 78	
Railway Accounts (Loans non-active), per schedule K	611,747,239 63	
Canadian Government Merchant Marine, Limited	11,232,509 85	
Miscellaneous Investments and other accounts (non-active), per schedule L.	41,687,875 83	
		1,629,581,868 04
(B) Balance Consolidated Fund brought forward March 31, 1928	699,913,096 02	
Excess of Revenue over Expenditure, year ended March 31, 1929	103,990,258 96	
		595,922,837 06
		2,225,504,705 10

OF CANADA

MARCH 31, 1929

LIABILITIES—	$ cts.
Dominion Notes in Circulation	204,501,216 54
Bank Circulation Redemption Fund	6,098,583 30
Post Office Account, Money Orders, Postal Notes, etc., outstanding	7,690,607 17
Post Office Savings Bank Deposits	28,375,769 74
Insurance and Superannuation Funds, per schedule M	61,450,834 91
Trust Funds, per schedule N	20,337,483 21
Contingent Funds, per schedule O	794,286 09
Province Accounts, per schedule P	9,623,816 77
Miscellaneous Current Accounts, per schedule Q	93,257 63
Funded Debt, per schedule R	2,305,065,772 30
Interest Due and Unpaid, per schedule S	3,002,345 66
	2,647,033,973 32
Balance Net Debt March 31, 1929, brought forward	2,225,504,705 10
	2,225,504,705 10

We have examined the attached Balance Sheet of the Dominion of Canada as at March 31, 1929, and have obtained all the information and explanations required by us.

We certify that in our opinion, the said Balance Sheet, with accompanying Schedules A to S and V, is properly drawn up so as to exhibit a true and correct view of the financial position of the Dominion of Canada at March 31, 1929, according to the information and explanations received by us and as shown by the Books of Account of the Dominion.

P. S. ROSS & SONS,
Chartered Accountants.

NOTE.—Indirect Liabilities—
Guarantees given by the Dominion of Canada are listed in Schedule V attached and amount in total to $736,956,364.39.

THE DOMINION

EXPENDITURE AND

YEAR ENDED

EXPENDITURE		$ cts.
Ordinary		
Agriculture, per schedule No. 1		8,127,905 73
Finance, per schedule No. 2		3,203,758 16
" Interest on Public Debt, per schedule No. 2		124,989,950 19
" Subsidies to Provinces, per schedule No. 2		12,553,724 50
Immigration and Colonization, per schedule No. 3		2,955,844 89
Indian Affairs, per schedule No. 4		4,789,503 07
Interior, per schedule No. 5		7,787,061 56
Justice, per schedule No. 6		4,447,901 29
Labour, per schedule No. 7		2,595,939 51
Legislation, per schedule No. 8		2,340,304 72
Marine and Fisheries, per schedule No. 9		9,488,120 40
Mines, per schedule No. 10		1,272,577 22
National Defence, per schedule No. 11		19,674,200 62
National Revenue, per schedule No. 12		13,542,434 58
Pensions, per schedule No. 13		41,487,322 68
Post Office, per schedule No. 14		34,949,549 80
Public Works, per schedule No. 15		18,684,962 25
Railways and Canals, per schedule No. 16		11,047,887 31
Royal Canadian Mounted Police, per schedule No. 17		2,647,921 60
Pensions and National Health, per schedule No. 18		9,176,702 30
Soldier and General Land Settlement, per schedule No. 19		1,441,950 55
Trade and Commerce, per schedule No. 20		6,126,974 93
Other Departments, per schedule No. 21		2,693,598 37
Miscellaneous, per schedule No. 22		4,926,827 80
		350,952,924 03
Special		
Adjustment of War Claims, per schedule No. 23	119,847 74	
Cost of Loan Flotations, per schedule No. 24	11,330 21	
Miscellaneous Charges, per schedule No. 25	2,055,822 85	
		2,187,000 80
Non-Active Accounts written off and charged to Consolidated Fund, per schedule No. 26		3,810,543 99
		356,950,468 82
Balance being excess of Revenue over Expenditure carried to Consolidated Fund		103,990,258 96
		460,940,727 78

CAPITAL

EXPENDITURE	$ cts.
Canals, per schedule G.G. (to cash statement)	13,680,063 80
Public Works, per schedule H.H. (to cash statement)	3,385,658 43
Railways, per schedule I.I. (to cash statement)	6,449,848 58
	23,515,570 81

OF CANADA

Revenue Account

March 31, 1929

Revenue		$ cts.	$ cts.
Ordinary			
National Revenue, per schedule No. 27—			
Customs Import Duties		187,206,332 47	
Excise Duties		63,684,953 72	
Sales Tax, Tax on Cheques, Transportation, Tax, etc		83,007,282 78	
Income Tax		59,422,323 25	
Business Profits Tax		455,232 27	
Trust and Loan Companies Tax		7,640 88	
Sundry Collections		890,981 60	
			394,674,746 97
Finance, per schedule No. 28—			
Chartered Banks		1,242,398 99	
Insurance Companies		894,863 98	
Interest on Investments		12,227,561 87	
Sundry Collections		1,087,728 33	
			15,452,553 17
Interior, per schedule No. 29			4,118,581 72
Marine and Fisheries, per schedule No. 30			874,793 33
Patent and Copyright Office, per schedule No. 31			530,384 19
Post Office, per schedule No. 32			30,628,874 90
Public Works, per schedule No. 33			640,385 01
Railways and Canals, per schedule No. 34			1,391,300 69
Trade and Commerce, per schedule No. 35			4,118,207 10
Other Departments, per schedule No. 36			3,034,046 66
			455,463,873 74
Special			
War and Demobilization Receipts, per schedule No. 37		789,246 80	
Miscellaneous Receipts, per schedule No. 38		4,687,607 24	
			5,476,854 04
			460,940,727 78

Account

Receipts	$ cts.
Canals, per schedule G.G. (to cash statement)	515,481 54
Public Works, per schedule H.H. (to cash statement)	42,944 66
Railways, per schedule I.I. (to cash statement)	147,869 48
Balance carried to Capital Account	22,809,275 13
	23,515,570 81

CONDENSED CASH

YEAR ENDED

RECEIPTS

	$ cts.	$ cts.
Balance from fiscal year 1927-28—		
Banks in Canada	28,463,246 66	
Banks in New York	7,778,581 51	
Bank of Montreal, London, England	9,587,553 87	
		45,829,382 04
Dominion Notes		15,869,726 93
Specie Reserve		34,561,368 63
Bank Circulation Redemption Fund		169,364 28
Post Office Account—Money Orders, Postal Notes, etc		2,201,391 91
Advances to Foreign Governments, per schedule AA		200,000 00
Insurance and Superannuation Funds, per schedule BB		9,811,724 55
Trust Funds, per schedule CC		581,866 00
Miscellaneous Current Accounts, per schedule DD		1,441,451 90
Soldier and General Land Settlement, per schedule EE		3,887,888 52
Interest due and unpaid, per schedule FF		124,271 42
Consolidated Fund, per Expenditure and Revenue Accounts		103,990,258 96
		218,668,695 14

NOTE.—Where there have been both Receipts and Disbursements affecting the above indicated accounts, the net amount only is shown.

STATEMENT

MARCH 31, 1929

	PAYMENTS			
	$	cts.	$	cts.
Capital Accounts—				
Public Works, Canals, per schedule GG	13,164,582	26		
Public Works, Miscellaneous, per schedule HH	3,342,713	77		
Public Works, Railways, per schedule II	6,301,979	10		
			22,809,275	13
Loans to Canadian Government Merchant Marine, Limited			758,000	00
Miscellaneous Advances (non-active), per schedule JJ			2,507,526	26
Advances to Provinces, Banks, etc., per schedule KK			51,327,810	05
Savings Bank Deposits, per schedule LL			2,728,006	52
Contingent Funds, per schedule MM			833,289	39
Loan Accounts (Funded Debt), per schedule NN			55,092,903	18
Temporary Loans, per schedule OO			201,000	00
Balance to fiscal year 1929-30—				
Banks in Canada	52,584,441	37		
Banks in New York	29,196,725	56		
Bank of Montreal, London, England	629,717	68		
			82,410,884	61
			218,668,695	14

SCHEDULES TO BALANCE SHEET

—	$ cts.	$ cts.	$ cts.
SCHEDULE "A"			
Advances to Provinces, Banks, etc.—			
Province of British Columbia (Housing Loans)	1,701,500 00		
Province of Manitoba (Housing Loans)	1,600,000 00		
Province of New Brunswick (Housing Loans)	1,198,000 00		
Province of Nova Scotia (Housing Loans)	1,212,000 00		
Province of Prince Edward Island (Housing Loans)	50,000 00		
Province of Quebec (Housing Loans)	7,304,202 72		
		13,065,702 72	
Montreal Harbour Commission	50,350,000 00		
Vancouver Harbour Commission	17,460,900 00		
St. John Harbour Commission	602,000 00		
Halifax Harbour Commission	30,000 00		
Chicoutimi Harbour Commission	500,000 00		
		68,942,900 00	
Loans to Banks, "Finance Act," Chap. 70, R.S. 1927		83,500,000 00	
Montreal Turnpike Trust		133,156 56	
St. John Bridge and Railway Extension Company		433,900 00	
Canadian Farm Loan Board	50,000 00		
Less—Canadian Farm Loan Board, special disbursements	44,989 95		
		5,010 05	
			166,080,669 33
SCHEDULE "B"			
Advances to Foreign Governments—			
Greek Government		7,080,000 00	
Roumanian Government		23,969,720 00	
			31,049,720 00
SCHEDULE "C"			
Soldier and General Land Settlement Loans—			
Soldier Land Settlement Loans	72,589,863 29		
General Land Settlement Loans	7,625,423 77		
Land Settlement, Purchased Lands	103,437 30		
		80,318,724 36	
Less—Soldier Land Settlement Assurance Fund	667,319 98		
Land Settlement Suspense Account	193,421 65		
Amount transferred to Non-Active Accounts to provide for revaluations and losses	21,282,409 45		
		22,143,151 08	
			58,175,573 28
SCHEDULE "D"			
Miscellaneous Current Accounts—			
Advances to Royal Mint—Gold Purchase Account	936,722 06		
" Silver Purchase Account	2,338,006 59		
" Nickel Purchase Account	34,589 96		
" Copper Purchase Account	11,069 48		
		3,320,388 09	
Bank of Montreal, Provincial Notes Suspense		27,622 83	
Canada Grain Act Advance Account		10,121 37	
Canadian Government Railways "Open Accounts"	6,042,932 52		
" " "Stores Account"	9,757,420 40		
		15,800,352 92	
Dominion Assay Office—Gold Purchase Account		86,721 66	
Empire Settlement Scheme—Advances under		134,534 50	
Foreign Coin withdrawn from circulation		18,726 55	
Imperial Government Account		26,433 06	
King's Printer Advance—Printing		593,792 70	
King's Printer Advance—Stationery		240,774 24	
Saskatchewan Government Seed Grain Advances, 1908		90,303 33	
Seed Grain and Relief, Department of Interior	3,879,283 51		
Less amount transferred to Non-Active Assets	1,223,192 39		
		2,656,091 12	
St. John and Quebec Railway Stores		2,590 94	
War and Victory Loans, adjustment accounts		12,050 00	
Dominion Notes—Deficiency Adjustment Account		584 00	
			23,021,087 31

SCHEDULES TO BALANCE SHEET—*Continued*

—	$ cts.	$ cts.	$ cts.
SCHEDULE "E"			
Public Works (Canals)—			
Burlington Bay Canal		308,328 32	
Chambly Canal, River Richelieu		580,092 59	
Improvement to Trent Canal		559,067 70	
Lachine Canal		11,087,182 65	
Lake St. Peter		1,164,235 08	
Murray Canal		1,248,946 71	
Ottawa Works		6,875,244 17	
Quebec Canals		34,841 69	
Rideau Canal		143,411 12	
Sault Ste. Marie Canals		4,935,809 42	
St. Anne's Lock—Railway Bridge at Isle Perrot		150,000 00	
St. Lawrence Canals		34,143,925 00	
St. Lawrence Ship Canal		133,896 80	
St. Ours Locks		5,690 91	
St. Peter's Canal		492,023 82	
Tay River Navigation		476,128 73	
Trent River Navigation		19,076,911 35	
Welland Canal		29,903,114 35	
Welland Ship Canal		103,293,625 85	
Miscellaneous		125 00	
			214,612,601 26
SCHEDULE "F"			
Public Works (Railways)—			
Canadian Government Railways		66,343,059 19	
Cape Breton Railway		104,520 54	
Caraquet & Gulf Shore Railway		209,950 00	
Elgin & Havelock Railway		33,530 00	
Intercolonial Railway		112,183,928 68	
International Railway of New Brunswick		2,681,377 35	
Lotbiniere & Megantic Railway		336,875 00	
National Transcontinental Railway		164,583,262 41	
New Brunswick & P.E.I. Railway		360,790 66	
Prince Edward Island Railway		11,744,541 78	
Quebec Bridge		21,706,664 49	
Quebec & Saguenay Railway		6,892,575 85	
Salisbury & Albert Railway		84,390 41	
St. Martin's Railway		72,624 91	
York & Carleton Railway		20,976 16	
			387,359,067 43
Hudson Bay Railway	23,283,813 62		
Hudson Bay Railway, Fort Churchill Terminals	3,668,026 46		
Hudson Bay Railway, Port Nelson Terminals	6,240,200 86		
		33,192,040 94	
Hudson Bay Railway, residue of cost of Steamer *Sheba*		78,610 58	
			33,270,651 52
Other Railways and Miscellaneous—			
Digby & Annapolis Railway		660,683 09	
North Railway		250,000 00	
Governor General's Cars		71,538 82	
Miscellaneous		18,000 00	
Canadian Government Railways—Canada Central Railway—Peace River Bridge		175,000 00	
Canadian Government Railways—Residue of capital cost of steamers *Drummond* and *McKee*		851,853 24	
			2,027,075 15
			422,656,794 10
SCHEDULE "G"			
Public Works (Miscellaneous)—			
Bare Point Breakwater		217,995 90	
Canadian Building, London, England		1,539,073 11	
Canadian Legation Building and Site, Washington, D.C.		477,754 35	
Cape Tormentine Harbour		236,860 63	
Esquimalt Graving Dock		7,746,673 17	
Georgian Bay to Montreal Waterway Survey		918,796 85	
Carried forward		11,137,154 01	

SCHEDULES TO BALANCE SHEET—*Continued*

—	$ cts.	$ cts.	$ cts.
Brought forward		11,137,154 01	
SCHEDULE "G"—*Concluded*			
Public Works (Miscellaneous)—*Concluded*			
Government Buildings, Ottawa		28,399,786 77	
Government Shipbuilding Programme		55,615,583 43	
Halifax Dry Dock		1,552,827 43	
Halifax Elevator Site		46,063 27	
Improvements to the St. Lawrence		36,771,756 13	
Kingston Graving Dock		556,589 35	
Land and Cable Telegraph Lines		348,320 77	
Levis Graving Dock		971,592 58	
Montreal Harbour Improvements		1,060,342 83	
New Dominion Building, Toronto		1,166,646 95	
Ottawa, Expropriation of Property between Sparks and Wellington Streets, east of Elgin		320,934 86	
Port Arthur and Fort William and River Kaministiquia		15,129,506 49	
Port Colborne Harbour		904,459 39	
Quebec Harbour Improvements		9,378,050 72	
Rainy River, Lock and Dam		133 80	
Sorel Harbour Improvements		488,463 90	
St. Andrews Rapids, including Red River Improvements		1,569,776 99	
St. John Harbour Improvements		18,112,562 14	
Tiffin Harbour Improvements		481,621 59	
Toronto Harbour Improvements		8,986,205 44	
Vancouver Harbour Improvements		3,600,078 73	
Victoria Harbour, Ontario, Improvements		761,801 79	
Victoria Harbour, British Columbia, Improvements		5,131,024 94	
Yukon Territory Works		1,921,392 10	
Halifax Harbour Improvements		12,830,122 16	
Lower Lakes Terminals		73,102 50	
			217,315,901 06
SCHEDULE "H"			
Military Property and Stores—			
Military Property and Stores		12,118,150 87	
LESS—Fort Osborne Barracks, Winnipeg	62,947 27		
St. Helen's Island Barracks Site	19,783 10		
Toronto Barracks Site	1,250 65		
		83,981 02	
			12,034,169 85
SCHEDULE "I"			
Territorial Accounts—			
Northwest Territories, Organization		1,460,000 00	
Northwest Territories, Purchase		1,460,000 00	
Expenses connected with the Northwest Rebellion		826,077 87	
Dominion Lands to March 31, 1911	10,425,395 92		
LESS—Received from Dominion Lands	4,275,526 11		
		6,149,869 81	
			9,895,947 68
SCHEDULE "J"			
Railway Accounts (Old)—			
Canadian Pacific Railway		62,791,435 25	
Grand Trunk Railway Debenture Account		15,142,633 34	
Grand Trunk Railway Interest Account		10,457,458 01	
Grand Trunk Railway Special Account		7,302 18	
			88,398,828 78
SCHEDULE "K"			
Railway Accounts (Loans Non-active)—			
Canadian Northern Railway—			
Ontario Interest Account (Sec. 10, Chap. 6, Acts of 1911)	2,396,099 68		
Interest Account (Chap. 20, Acts of 1914)	5,294,000 02		
Carried forward	7,690,099 70		

SCHEDULES TO BALANCE SHEET—*Continued*

	$ cts.	$ cts.	$ cts.
Brought forward	7,690,099 70		
SCHEDULE "K"—*Concluded*			
Railway Accounts (Loan Non-active)—*Concluded*			
Canadian Northern Railway—Concluded			
Loan Account, 1914 (Chap. 4, Acts of 1915)	10,000,000 00		
Loan Account, 1916 (Chap. 29, Acts of 1916)	15,000,000 00		
Purchase of Capital Stock (Chap. 24, Acts of 1917, Sec. 4, Subsec. 3)	10,000,000 00		
Loan Account, Legislation 1917 (7-8 George V, Chap. 24)	25,000,000 00		
Loan on account of Interest and Equipment (Act No. 1, Legislation of 1918)	25,000,000 00		
Loan under authority of vote 108, Appropriation Act, No. 4, 1919	35,000,000 00		
Loan under authority of vote 127, Appropriation Act, No. 4, 1920	48,611,077 00		
Loan under authority of vote 126, Appropriation Act, No. 2, 1921	44,419,806 42		
Loan under authority of vote 136, Appropriation Act, No. 1, 1922	42,800,000 00		
Loan under the War Measures Act	1,887,821 16		
		265,408,804 28	
Grand Trunk Railway—			
Loan under authority of vote 478, Appropriation Act, No. 4, 1920	25,000,000 00		
Loan under authority of vote 126, Appropriation Act, No. 2, 1921	55,293,435 18		
Loan under authority of vote 137, Appropriation Act, No. 1, 1922	23,288,747 15		
Grand Trunk Pacific Loan of 1913 (Chap. 23 of Acts of 1913), Guaranteed by the Grand Trunk Railway Co.	15,000,000 00		
		118,582,182 33	
Grand Trunk Pacific Railway—			
Loan Account of 1914 (Chap. 4 of Acts of 1915)	6,000,000 00		
3 per cent Mortgage Bonds (Chap. 24, 3-4 Geo. V. 1913)	33,093,333 23		
Interest Account, Appropriation Act, No. 2, 1916	7,081,783 45		
Loan Account, Appropriation Act, No. 4, 1917	5,038,053 72		
Loan Account, Appropriation Act, 1918	7,471,399 93		
Receiver Account, O.C. 26th March, 1919, P.C. 635	45,764,162 35		
Guaranteed Interest Account (Guaranteed by the Dominion of Canada)	8,704,662 65		
Branch Lines Coupons (Guaranteed by the Provinces of Alberta and Saskatchewan)	2,898,536 98		
		116,051,932 31	
Canadian National Railways—			
Loan under authority of Appropriation Act, 1923	24,550,000 00		
Loan under authority of Appropriation Act, 1924	10,000,000 00		
Loan under authority of Appropriation Act, 1925	10,000,000 00		
Loan under authority of Appropriation Act, 1926	10,000,000 00		
		54,550,000 00	
Loans to Railways—			
Purchase of Railway Equipment, Chap. 38, Statutes of 1918		57,154,320 71	
			611,747,239 63
SCHEDULE "L"			
Miscellaneous Investments and other Accounts (Non-active)—			
Earl of Selkirk Mortgage on property in Township of Moulton		13,900 00	
Grand Trunk Railway Preference Stock		121,739 65	
High Commissioner's Suspense		4,230 95	
Italian Government		702 52	
Quebec Harbour Commission		18,117,995 68	
Quebec Turnpike Trust Bond		20,000 00	
Russian Government Account		55,571 82	
Seed Grain and Relief—Department of the Interior		1,223,192 39	
Soldier and General Land Settlement Loans		21,282,409 45	
Carried forward		40,839,742 46	

SCHEDULES TO BALANCE SHEET—*Continued*

	$ cts.	$ cts.	$ cts.
Brought forward		40,839,742 46	
SCHEDULE "L"—*Concluded*			
Miscellaneous Investments and other Accounts (Non-active)—*Concluded*			
Three Rivers Harbour Debentures	81,760 97		
Less—Sinking Funds	2,308 41		
		79,452 56	
University Hospital—Edmonton, Alberta		100,000 00	
Unpaid Coupons—New York Loans "Suspense"		45,913 50	
Victoria Shipowners, Limited		621,987 05	
Victory Loan, 1918, Interest Suspense		780 26	
			41,687,875 83
SCHEDULE "M"			
Insurance and Superannuation Funds—			
Government Annuities		18,369,099 88	
Insurance Fund, Civil Service		5,058,479 42	
Returned Soldiers' Insurance		6,866,911 13	
Retirement Fund		5,245,160 16	
Civil Service Superannuation and Retirement Act, 1893, Chap. 17, R.S. 1906		1,964,202 52	
Civil Service Superannuation Act, 1924, Chap. 24, R.S. 1927		23,946,981 80	
			61,450,834 91
SCHEDULE "N"			
Trust Funds—			
Alberta School Lands		63,536 28	
Burrard Dry Dock Pontoons		8,851 99	
Common School Fund		2,661,243 00	
Canadian Military Canteen Funds		20,000 00	
Canadian National Railways—			
Equipment Issue, 1923, Redemption Account	1,000 00		
Guaranteed Bond Issues (Outstanding interest)	80,800 00		
		81,800 00	
Contractors' Securities		1,455,578 85	
Decayed Pilots' Fund	112,973 57		
Less—Amount invested in Bonds (Appendix No. 21)	97,000 00		
		15,973 57	
Empress of Ireland Relief Fund		858 33	
Halifax Pilots' Pension Fund	82,368 55		
Less—Amount invested in Bonds (Appendix No. 22)	75,393 33		
		6,975 22	
Immigration Guarantee and Special Funds		383,137 70	
Indian Funds		13,629,403 74	
Manitoba School Lands		7,709 88	
Militia and Defence Regimental Funds		5,050 00	
Military Estates No. 1		124,034 72	
Military Estates No. 2		16,563 54	
Royal Military College—Cadet Funds		10,626 91	
Saskatchewan School Lands		631,177 08	
Soldiers' Civil Re-establishment—War Service Gratuity		174,577 89	
Soldiers' Civil Re-establishment—Pensions, etc		529,408 58	
St. John Pilots' Pension Fund	43,354 85		
Less—Amount invested in Bonds (Appendix No. 23)	41,000 00		
		2,354 85	
Strathcona Trust Fund		500,000 00	
Sydney Pilots' Pension Fund	42,421 08		
Less—Amount invested in Bonds (Appendix No. 24)	33,800 00		
		8,621 08	
			20,337,483 21

SCHEDULES TO BALANCE SHEET—*Continued*

	$ cts.	$ cts.	$ cts.
SCHEDULE "O"			
Contingent Funds—			
Banque du Peuple		14,340 85	
Banque St. Hyacinthe		7,182 00	
Banque St. Jean		1,887 23	
Banque Ville Marie		4,549 59	
Bank of Vancouver		3,705 87	
Bank of Yarmouth		859 82	
Board of Pension Commissioners, Mennonite Funds		4,591 29	
Briton Medical and General Life Association Funds		281 06	
Cash Suspense—Unallocated funds received		287,909 25	
Central Bank		2,225 94	
Columbia River Special		2,818 04	
Commercial Bank of Manitoba		6,450 56	
Farmers Bank		2,044 52	
Home Bank of Canada		54,616 41	
Income Tax (Appeals) Suspense		4,800 00	
Interior Department, Suspense		717 00	
Internment Operations		23,071 39	
Land Assurance Fund		11,746 12	
Ontario Bank		21,708 23	
Outstanding Cheques		30,975 68	
Prisoners of War		6,288 73	
Railways and Canals, Suspense		5,192 67	
Royal Canadian Mounted Police, Special		582 21	
Sovereign Bank of Canada		9,749 68	
St. Stephens Bank		11,300 67	
Unclaimed cheques, Canadian Government Railways		1,157 48	
Unclaimed dividends *re* liquidation under the Bankruptcy Act		25,869 77	
Victory Loan 1917, at credit of subscribers in arrears		103,470 82	
Victory Loan 1918, at credit of subscribers in arrears		63,504 65	
Victory Loan 1919, at credit of subscribers in arrears		43,560 05	
Victory Loans Canvassers Suspense		1,629 58	
York County Loan and Savings Co. (In Liquidation)		35,498 93	
			794,286 09
SCHEDULE "P"			
Province Accounts—			
Province of British Columbia Debt Account	583,021 40		
Province of Manitoba Debt Account	3,578,941 20		
Province of Nova Scotia Debt Account	1,055,433 64		
Province of New Brunswick Debt Account	529,299 39		
Province of Ontario Debt Account (47 Vic. C. 4)	2,848,289 52		
Province of Prince Edward Island Debt Account	775,791 83		
Province of Quebec Debt Account (47 Vic. C. 4)	2,549,213 61		
		11,919,990 59	
Less—Province of Nova Scotia Suspense Account	40,161 86		
Province of Prince Edward Island Land Account	782,402 33		
Province of Quebec Debt Account	1,473,609 63		
		2,296,173 82	
			9,623,816 77
SCHEDULE Q			
Miscellaneous Current Accounts—			
Indian Affairs "Special"		21,917 57	
St. John and Quebec Railway (Open Accounts)		54,022 26	
Unpaid Debentures		17,236 04	
Unpaid Warrants		81 76	
			93,257 63
SCHEDULE "R"			
Funded Debt—			
Payable in Canada—			
Provincial Notes, Nova Scotia		39,180 16	
Unpaid Warrants, Prince Edward Island		549 59	
Compensation to Seigneurs		12,140 15	
Compensation to Townships		153 00	
Carried forward		52,022 90	

SCHEDULES TO BALANCE SHEET—*Continued*

—	$ cts.	$ cts.	$ cts.
Brought forward		52,022 90	
SCHEDULE "R"—*Continued*			
Funded Debt—Continued			
Payable in Canada—Concluded			
Province of New Brunswick, 6 per cent Loan Debentures		600 00	
Province of Canada, 5 per cent Loan Debentures		400 00	
Dominion Stock, issue A, 6 per cent		4,000 00	
" B, 3½ per cent		20,400 00	
" C, 3½ per cent		48,666 67	
Debenture Stock, 5 per cent, 1919		2,000 00	
Debenture Stock, 5 per cent School Lands—			
Province of Alberta	9,061,000 00		
Province of Manitoba	5,881,000 00		
Province of Saskatchewan	16,015,000 00		
		30,957,000 00	
Debenture Stock, 5½ per cent 1921		200 00	
War Savings Certificates		19,365 00	
Dominion of Canada Savings Certificates		14,145 00	
War Savings and Thrift Stamps		97,995 00	
Dominion of Canada War Loan, 1915-25, 5 per cent		43,300 00	
" " 1916-31, 5 per cent		52,931,600 00	
" " 1917-37, 5 per cent		90,166,900 00	
Victory Loan 1917, 5½ per cent, due 1922	111,250 00		
" " 1927	227,550 00		
" " 1937	236,299,850 00		
		236,638,650 00	
Victory Loan 1918, 5½ per cent, due 1923	126,700 00		
" " 1933	446,658,800 00		
		446,785,500 00	
Victory Loan 1919, 5½ per cent, due 1924	65,450 00		
" " 1934	511,910,650 00		
		511,976,100 00	
Renewal Loan 1922, 5½ per cent, due 1927	74,650 00		
" " 1932	73,325,150 00		
		73,399,800 00	
Refunding Loan 1923, 5 per cent, due 1928	248,500 00		
" " 1943	147,001,100 00		
		147,249,600 00	
Refunding Loan 1924, 4½ per cent, due 1944		50,000,000 00	
Refunding Loan 1925, 4½ per cent, due 1940		75,000,000 00	
Refunding Loan 1926, 4½ per cent, due 1930	20,000,000 00		
Refunding Loan 1926, 4½ per cent, due 1946	45,000,000 00		
		65,000,000 00	
Three Year Treasury Notes, 4 per cent, due Dec. 1, 1930		45,000,000 00	
		1,825,408,244 57	
Less Sinking Funds—			
War Loan, 1916-31	799,300 00		
" 1917-37	379,800 00		
Sinking Funds Cash	389,210 36		
		1,568,310 36	
			1,823,839,934 21
Payable in London—			
3½ per cent Loan, 1884 (1909-34)	23,467,206 27		
3½ " Canadian Pacific Railway Land Grant Loan, due July 1, 1938	15,056,006 66		
3½ " 1930-50	137,058,841 00		
3 " 1888, due July 1, 1938	8,071,230 16		
3 " 1892, due July 1, 1938	18,250,000 00		
3 " 1894, due July 1, 1938	10,950,000 00		
2½ " 1897, due Oct. 1, 1947	4,888,185 64		
4 " 1940-60	93,926,666 66		
		311,668,136 39	
Less Sinking Funds held on account of—			
3½ per cent Loan 1884	14,684,116 98		
3½ per cent Loan 1930-50	23,939,421 17		
4 per cent Loan 1940-60	12,276,560 15		
		50,900,098 30	
			260,768,038 09
Carried forward			2,084,607,972 30

SCHEDULES TO BALANCE SHEET—*Continued*

	$ cts.	$ cts.	$ cts.
Brought forward			2,084,607,972 30
SCHEDULE "R"—*Concluded*			
Funded Debt—Concluded			
Payable in New York—			
5 per cent Bond Loan 1915-35		874,000 00	
5 per cent Public Service Loan 1916, due 1926	5,000 00		
5 per cent Public Service Loan 1916, due 1931	25,000,000 00		
		25,005,000 00	
5½ per cent Bond Loan 1919-29		54,577,800 00	
5 per cent Bond Loan 1922-52		100,000,000 00	
4½ per cent Bond Loan 1926-36		40,000,000 00	
5 per cent two-year notes due Aug. 1, 1919		1,000 00	
			220,457,800 00
			2,305,065,772 30
SCHEDULE "S"			
Interest due and unpaid—			
Unpaid Interest (Domestic Loans)		2,140,510 47	
" (New York Loans)		805,565 25	
" (London Loans)		44,913 71	
Unpaid Dividends, Province of British Columbia		33 67	
" Province of Canada		4,663 18	
" Province of New Brunswick		1,279 00	
" Province of Nova Scotia		795 80	
" Province of Prince Edward Island		867 25	
" Dominion Stock		3,717 33	
			3,002,345 66

SCHEDULES TO BALANCE SHEET—*Continued*

	Amount Authorized	Amount outstanding at March 31, 1929	
		Held by the Public	Held by the Minister of Finance
SCHEDULE "V"	$ cts.	$ cts.	$ cts.
Guaranteed Securities—			
Railway Securities Guaranteed as to Principal and Interest—			
1. Canadian Northern Ry. Co., 3 per cent deb. stock due 1953, £1,923,287- 0- 0	9,359,996 72	9,359,996 72	
2. Canadian Northern Ry. Co., 3½ per cent deb. stock due 1958, £1,622,586-19- 9	7,896,590 00	7,896,565 00	
3. Canadian Northern Ont. Ry. Co., 3½ per cent deb. stock due 1961, £7,350,000- 0- 0	35,770,000 00	34,229,996 87	1,540,003 13
4. Canadian Northern Alta. Ry. Co., 3½ per cent deb. stock due 1960, £647,260- 5- 6	3,150,000 00	3,149,998 66	
5. Grand Trunk Pacific Ry. Co., 3 per cent bonds due 1962, £14,000,000- 0- 0	68,040,000 00	34,992,000 00	33,048,000 00
6. Canadian Northern Alta. Ry. Co., 3½ per cent deb. stock due 1962, £733,561-12-10	3,569,999 98	.....	3,569,996 86
7. Canadian Northern Ry. Co., 4 per cent deb. stock and bonds, due 1934	45,000,000 00	17,060,333 33	12,500,000 00
8. Grand Trunk Pacific Ry. Co., 4 per cent bonds due 1962, £3,280,000- 0- 0	15,940,800 00	8,440,848 00	7,499,952 00
9. Canadian Northern Ry. Co., 7 per cent bonds due 1940	25,000,000 00	24,793,000 00	
10. Grand Trunk Ry. Co., 7 per cent bonds due 1940	25,000,000 00	24,743,000 00	
11. Canadian Northern Ry. Co., 6½ per cent bonds due 1946	25,000,000 00	25,000,000 00	
12. Grand Trunk Ry. Co., 6 per cent bonds due 1936	25,000,000 00	25,000,000 00	
13. Canadian National Ry. Co., 5 per cent serial equipment bonds, 1923-38	22,500,000 00	14,250,000 00	
14. Canadian National Ry. Co., 5 per cent bonds due 1954	50,000,000 00	50,000,000 00	
15. Canadian National Ry. Co., 4½ per cent bonds due 1954	26,000,000 00	26,000,000 00	
16. Canadian National Ry. Co., 4½ per cent bonds due 1930	18,000,000 00	18,000,000 00	
17. Canadian Northern Ry. Co., 4½ per cent bonds due 1935	17,000,000 00	17,000,000 00	
18. Canadian National Ry. Co., 1927, 2 per cent Guar. Deb. Stock, £7,176,801- 0- 0	34,927,098 20	32,793,770 53	
19. Canadian National Ry. Co., 4½ per cent Gold Bonds due 1957	65,000,000 00	65,000,000 00	
20. Canadian National Ry. Co., 4½ per cent Gold Bonds, due 1968	35,000,000 00	35,000,000 00	
21. Canadian National Ry. Co., 4½ per cent Bond, payable on demand	23,500,000 00	*	
	580,654,484 90	472,709,509 11	58,157,951 99
Railway Securities Guaranteed as to Interest only—			
22. Grand Trunk Ry. Acquisition Guarantees—			
Grand Trunk 4 per cent guar. stock, £12,500,000	60,833,333 33	60,833,333 33	
Grand Trunk 5 per cent perp. deb. stock, £4,270,375	20,782,491 67	20,782,491 67	
Great Western 5 per cent perp. deb. stock, £2,723,-080	13,252,322 67	13,252,322 67	
Grand Trunk 4 per cent perp.deb. stock, £24,624,455	119,839,014 33	119,839,014 33	
Northern Ry. of Canada, 4 per cent perp. deb. stock, £308,215	1,499,979 67	1,499,979 67	
	216,207,141 67	216,207,141 67	
Other Securities Guaranteed as to Principal and Interest—			
23. The Harbour Commissioners of Montreal, Montreal South Shore Bridge 4½ per cent Bond, payable on demand	4,000,000 00	4,000,000 00	
24. The Harbour Commissioners of Montreal, Montreal South Shore Bridge 4½ per cent Bond, payable on demand	4,000,000 00	4,000,000 00	
Carried forward	8,000,000 00	8,000,000 00	

SCHEDULES TO BALANCE SHEET—*Concluded*

	Amount Authorized	Amount outstanding at March 31, 1929	
		Held by the Public	Held by the Minister of Finance
Brought forward	8,000,000 00	8,000,000 00	
SCHEDULE "V"—*Concluded*			
Other Securities Guaranteed as to Principal and Interest—Concluded			
25. The Harbour Commissioners of Montreal, Montreal South Shore Bridge 4¾ per cent Bond, payable on demand	4,000,000 00	4,000,000 00	
26. The Harbour Commissioners of Montreal, Montreal South Shore Bridge 5¼ per cent Bond, payable on demand	5,000,000 00	2,520,000 00	
27. Canadian National (West Indies) Steamships, Ltd., 4½ per cent Temporary Bond, payable on demand not later than Dec. 31, 1929	10,000,000 00	7,936,486 01	
28. St. John Harbour Commission—Bonded indebtedness of the City of St. John assumed by the Commission	1,467,164 96	1,467,164 96	
29. Debentures of the Commission issued to the City of St. John	667,953 04	667,953 04	
30. Harbour Commissioners, New Westminster 4¾ per cent debentures due 1948	700,000 00	700,000 00	
	29,835,118 00	25,291,604 01	

* Pending issue of guaranteed Securities, $22,748,109.60 was outstanding in the form of bank loans.

SCHEDULES OF ORDINARY EXPENDITURE, 1928-29

—	$ cts.	$ cts.	$ cts.
SCHEDULE No. 1			
Agriculture—			
Civil Government—Salaries	783,878 42		
Contingencies	139,250 97		
		923,129 39	
Agricultural Produce Marketing Agent in Great Britain	13,441 39		
Assistance in providing pre-cooling warehouse facilities for fruit in British Columbia	5,000 00		
Branch of Entomology	24,992 27		
Cold Storage Warehouses	13,334 70		
Compensation for Animals tested under the Animal Contagious Diseases Act, and dying before it was possible to slaughter them, under the provisions of the Act	1,770 99		
Compensation for slaughtered cattle—Governor General's Warrant	99,733 45		
Dairying, including grant of $5,000 to the National Dairy Council	263,035 85		
Destructive Insect and Pest Act	507,500 50		
Experimental Farms	1,887,037 30		
Experiments in the dehydration of fruits and vegetables	9,964 26		
Fruit Branch, including grant of $8,000 to the Canadian Horticultural Council	271,046 51		
Grant to the Department of Agriculture, Province of New Brunswick	5,000 00		
Grant to the Department of Agriculture, Province of Nova Scotia	20,000 00		
Health of Animals, Administration of the Animal Contagious Diseases Act and Meat and Canned Foods Act and necessary buildings	2,258,158 67		
International Institute of Agriculture	12,463 10		
Live Stock, including grants to Exhibitions, Feeder Shows, etc	1,387,506 11		
Publications Branch	22,403 91		
Seed, Feed and Fertilizer Control, including grants to Seed Fairs, etc	374,177 33		
World's Poultry Congress	25,000 00		
		7,201,566 34	
Miscellaneous—			
Gratuities		3,210 00	
			8,127,905 73
SCHEDULE No. 2			
Finance—			
Civil Government—Salaries	405,392 31		
Contingencies	39,516 10		
Inspector General of Banks	19,538 37		
		464,446 78	
Lieutenant Governors' Salaries (Appendix No. 6)		80,677 37	
Charges of Management (Appendix No. 8)		923,362 65	
Premium, Discount and Exchange (Appendix No. 9)		67,254 10	
Superannuation (Appendix No. 10)—			
No. 1 Civil Service Superannuation and Retirement Act, 1870, Chap. 17, R.S. 1906	577,661 23		
No. 3 Printing Bureau	17,791 53		
No. 4 Public Service Retirement Act of 1920	671,611 42		
No. 6 Civil Servants Widows' Annuities Act, 1927	140,569 91		
		1,407,634 09	
Miscellaneous—			
Ottawa Branch of the Royal Mint	190,181 46		
Gratuities	350 00		
Board of Audit	69,851 71		
		260,383 17	
			3,203,758 16
Interest on Public Debt (Appendix No. 7)—			
Funded Debt Payable in London		11,142,780 02	
Funded Debt Payable in Canada		98,148,055 08	
Funded Debt Payable in New York		11,396,571 78	
Temporary Loans		8,068 49	
Savings Banks		883,305 92	
Insurance and Superannuation Funds		2,339,310 82	
Trust Funds		894,302 35	
Bank Circulation Redemption Fund		177,555 73	
			124,989,950 19
Carried forward			128,193,708 35

SCHEDULES OF ORDINARY EXPENDITURE, 1928-29—*Continued*

	$ cts.	$ cts.	$ cts.
Brought forward			128,193,708 35
SCHEDULE No. 2—*Concluded*			
Subsidies to Provinces—			
Alberta		1,657,188 60	
British Columbia		738,816 66	
Manitoba		1,500,213 76	
New Brunswick		666,765 76	
Nova Scotia		661,841 28	
Ontario		2,642,611 68	
Prince Edward Island		381,931 88	
Quebec		2,256,419 88	
Saskatchewan		2,047,935 00	
			12,553,724 50
SCHEDULE No. 3			140,747,432 85
Immigration and Colonization—			
Civil Government—Salaries	286,382 40		
Contingencies	35,042 40		
		321,424 80	
Salaries	863,840 19		
Contingencies	1,067,066 13		
Chinese Immigration—Salaries and Contingencies	63,701 82		
Empire Settlement Scheme	616,990 00		
Relief of Distressed Canadians abroad	1,197 84		
Replacement of Trust Funds misappropriated	1,632 08		
St. John Immigration Buildings	17,538 70		
		2,631,966 76	
Miscellaneous—			
Gratuities		2,453 33	
			2,955,844 89
SCHEDULE No. 4			
Indian Affairs—			
Civil Government—Salaries	170,500 97		
Contingencies	19,909 90		
		190,410 87	
British Columbia	468,122 35		
Manitoba, Saskatchewan, Alberta and Northwest Territories	927,548 56		
New Brunswick	67,820 62		
Nova Scotia	82,943 17		
Ontario and Quebec	337,024 83		
Ontario and Quebec—Claim of Cayuga Indians	28,078 20		
Prince Edward Island	6,243 06		
Yukon	16,506 62		
General	231,361 81		
Annuities	217,231 00		
Indian Education	2,215,411 98		
		4,598,292 20	
Miscellaneous—			
Gratuities		800 00	
			4,789,503 07
SCHEDULE No. 5			
Interior—			
Civil Government—Salaries	1,418,548 36		
Contingencies	82,861 33		
		1,501,409 69	
Dominion Lands and Parks—			
Salaries of the Outside Service	624,411 40		
Contingencies	206,440 60		
Canadian National Parks	1,344,089 60		
Compassionate allowance to Mrs. E. S. Forbes	1,050 00		
Compassionate allowance to S. Knutson	500 00		
Claim of C. B. Jameson *re* coal mining rights	3,239 91		
Costs of litigation and legal expenses	9,970 81		
Carried forward	2,189,702 32	1,501,409 69	

SCHEDULES OF ORDINARY EXPENDITURE, 1928-29—*Continued*

—	$ cts.	$ cts.	$ cts.
Brought forward	2,189,702 32	1,501,409 69	
SCHEDULE No. 5—*Concluded*			
Dominion Lands and Parks—Concluded			
Fees and contingent expenses of the Board of Examiners for Dominion Land Surveys	2,000 00		
Grant to Alpine Club of Canada	1,000 00		
Grant to Canadian Forestry Association	4,000 00		
International and Boundary Waterways—Professional assistance to advise Departmental Officers	14,418 46		
Lake of the Woods Control Board	7,130 15		
Lake of the Woods Control Board—Lac Seul Conservation Act	357,908 91		
Manitoba Natural Resources Inquiry—Governor General's Warrant	16,294 52		
Migratory Birds Convention Act	58,436 71		
Ordnance Lands—Salaries and expenses	26,867 09		
Protection of Timber	1,476,829 79		
Publications, including Maps	233,120 92		
Salaries and Expenses in connection with Seed Grain and relief collections	47,154 57		
Supervisory Mining Engineer's Office—Expenses	10,552 28		
The Dominion Government's share of freight charges in connection with removal of settlers from drought stricken areas	782 00		
Transfer of Buffalo	10,201 60		
To pay damages and costs pursuant to the judgment of the Honourable Mr. Justice MacLean *re* estate of E. H. Maunsell *et al* vs. The Crown	40,000 00		
Water and Power investigations	471,640 25		
Exchequer Court Award *re* Kootenay Park	18,922 26		
		4,986,961 83	
Scientific Institutions—			
Dominion Observatory at Ottawa	55,146 49		
Dominion Observatory at Victoria, B.C.	20,953 75		
Geodetic Survey of Canada	264,846 52		
Geodetic Survey, International Boundaries	37,582 41		
Topographical and General Surveys	414,824 80		
To compensate the Temiskaming and Northern Ontario Railway in connection with their claim for injury to John Hedin	240 00		
		793,593 97	
Government of the Northwest Territories—			
Administration of Eskimo Affairs	41,266 17		
Administration of the Territories	198,940 40		
Explorations	77,518 06		
		317,724 63	
Government of the Yukon Territory—			
Administration of the Territory	66,181 44		
Grant to Local Council	45,000 00		
Grant for maintenance and construction of roads	73,000 00		
		184,181 44	
Miscellaneous—			
Gratuities		3,190 00	
			7,787,061 56
SCHEDULE No. 6			
Justice—			
Civil Government—Salaries		265,917 00	
Contingencies		37,107 51	
			303,024 51
Supreme Court—			
Salaries	87,000 00		
Contingencies	24,218 77		
		111,218 77	
Exchequer Court—			
Salaries	24,399 96		
Contingencies	9,204 28		
Travelling allowances—Admiralty Judges	46 00		
		33,650 24	
Carried forward		144,869 01	303,024 51

SCHEDULES OF ORDINARY EXPENDITURE, 1928-29—*Continued*

—	$ cts.	$ cts.	$ cts.
Brought forward		144,869 01	303,024 51
SCHEDULE No. 6—*Continued*			
Justice—Continued—			
Alberta—			
Supreme Court	100,806 44		
District Courts	59,538 61		
Travelling Allowances	28,952 35		
		189,297 40	
British Columbia—			
Court of Appeal	46,000 00		
Supreme Court	54,569 86		
County Courts	70,000 00		
Travelling allowances	19,859 04		
		190,428 90	
Manitoba—			
Court of Appeal	46,000 00		
Court of King's Bench	55,000 00		
County Courts	49,798 39		
Travelling Allowances	6,284 25		
		157,082 64	
New Brunswick—			
Court of Appeal	27,250 00		
Court of King's Bench	37,000 00		
County Courts	30,000 00		
Court of Divorce	500 00		
Travelling Allowances	10,312 20		
		105,062 20	
Nova Scotia—			
Supreme Court	60,249 99		
County Courts	34,652 70		
Court of Divorce	1,809 09		
Travelling Allowances	6,809 17		
		103,520 95	
Ontario—			
Court of Appeal	47,275 00		
High Court Division	114,200 00		
County Courts	324,932 23		
Travelling Allowances	39,232 33		
		525,639 56	
Prince Edward Island—			
Supreme Court	28,000 00		
County Courts	15,000 00		
Travelling Allowances	745 40		
		43,745 40	
Quebec—			
Court of King's Bench	109,000 00		
Superior Court	345,874 71		
Travelling Allowances	33,754 84		
		488,629 55	
Saskatchewan—			
Court of Appeal	37,000 00		
Court of King's Bench	73,000 00		
District Courts	89,999 92		
Travelling Allowances	18,453 98		
		218,453 90	
Yukon Territory—			
Salaries and Expenses		18,970 11	
Miscellaneous		9,809 11	
Living allowance for Judge of Atlin District, B.C.		1,200 00	
Travelling and living expenses of Judges of Manitoulin and Algoma Districts while acting in Sudbury District		3,500 00	
Remuneration to Herbert D. Smith while acting as Deputy Judge of the County Court of Kent County since the death of Judge Stanworth		3,000 00	2,203,208 73
Carried forward			2,506,233 24

SCHEDULES OF ORDINARY EXPENDITURE, 1928-29—*Continued*

	$ cts.	$ cts.	$ cts.
Brought forward			2,506,233 24
SCHEDULE No. 6—*Concluded*			
Justice—Concluded			
Penitentiaries—			
Alberta		2,894 04	
British Columbia		253,380 43	
Dorchester		259,921 94	
Kingston		434,899 99	
Manitoba		240,623 68	
Saskatchewan		208,287 66	
St. Vincent de Paul		407,316 17	
General		330 93	
			1,807,654 84
Miscellaneous—			
Bankruptcy Act—Administration		696 36	
Canadian Law Library, London, England		357 76	
Expenses of ligitated matters conducted within the Department of Justice		78,240 10	
Judicial Committee of the Privy Council		2,000 00	
Dominion Statutes—Revision		14,972 33	
Expenses of reference to Supreme Court of Canada *re* water powers		30,000 00	
Gratuities		7,746 66	
			134,013 21
			4,447,901 29
SCHEDULE No. 7			
Labour—			
Civil Government—Salaries	226,657 44		
Contingencies	19,610 71		
		246,268 15	
Act respecting Annuities—Administration	65,000 00		
Combines Investigation Act	28,703 73		
Conciliation and Labour Act	50,000 00		
Employment Offices Co-ordination Act (Administration)	12,115 59		
Employment Offices Co-ordination Act (under statute)	150,000 00		
Fair Wages and Inspection Officers	7,000 00		
Industrial Disputes Investigation Act	20,000 00		
International Labour Conference	20,000 00		
Joint Industrial Councils	3,000 00		
Old Age Pension Act—Administration	5,000 00		
Old Age Pension Act—under statute	832,686 78		
Technical Education Act—Administration	4,000 00		
Technical Education Act—under statute	1,152,165 26		
		2,349,671 36	
			2,595,939 51
SCHEDULE No. 8			
Legislation—			
Senate	539,235 13		
House of Commons	1,581,713 39		
Library—Salaries	43,810 00		
Contingencies	10,266 36		
Books for General Library	17,999 08		
Books for Library of American History	966 67		
Printing reports	734 24		
Printing of Parliament	69,083 52		
Elections	62,454 08		
Refund of the deposit of Charles Henry Gauvreau, candidate in Athabaska at the General Election of 1925	200 00		
		2,326,462 47	
Miscellaneous—			
Chief Electoral Officer, salary	6,000 00		
Office of the Chief Electoral Officer	6,797 75		
Compassionate allowance to widow of the late Thos. B. Flint	500 00		
Gratuities	544 50		
		13,842 25	
			2,340,304 72

SCHEDULES OF ORDINARY EXPENDITURE, 1928-29—*Continued*

—	$ cts.	$ cts.	$ cts.
SCHEDULE No. 9			
Marine and Fisheries—			
Civil Government—Salaries	503,147 29		
Contingencies: Marine Branch	54,788 62		
Contingencies: Fisheries Branch	24,968 85		
		582,904 76	
Ocean and River Service—			
Dominion Steamers and Icebreakers	1,649,336 48		
Establishment of a Patrol Service to investigate conditions of navigation in Hudson Strait and Hudson Bay	289,463 97		
Examination of Masters and Mates	19,999 76		
Hydrographic, Tidal and Current Survey	386,739 07		
Inspection of Live Stock shipments	3,643 73		
Commission to enquire into Radio Broadcasting situation	24,946 14		
Investigation into wrecks	4,921 40		
Life Saving Service	53,379 63		
Radio Service—General improvement of reception conditions to licensed broadcast listeners	166,775 89		
Radiotelegraph Service	710,057 76		
Registration of shipping	2,161 71		
Relief of distressed seamen	2,384 57		
Removal of obstructions in navigable waters	1,095 40		
Schools of navigation	7,815 82		
Subsidies for wrecking plants	45,000 00		
Miscellaneous and unforeseen expenses	4,966 04		
Compassionate allowance to Alfred Callow	1,497 85		
Compassionate allowance to J. B. Fontigny	3,050 00		
Compassionate allowance to Joseph Lemay	777 00		
Construction of an Icebreaker for Hudson Strait	305,243 33		
		3,683,255 55	
Lighthouse and Coast Service—			
Administration of Pilotage	141,657 35		
Agencies, rents and contingencies	223,280 33		
Allowance to Harbour Master at Amherstburg	600 00		
Breaking ice in Thunder Bay, Lake Superior and other points	30,000 00		
Compassionate allowance to John Davidson	500 00		
Compassionate allowance to Louis Madore	250 00		
Construction of lights and aids to navigation	683,011 80		
Maintenance and repairs to lighthouses	889,222 76		
Maintenance and repairs to wharves	6,057 33		
Pensions to retired pilots	9,550 00		
Salaries and allowances to lightkeepers	718,776 75		
Signal Service	109,993 63		
		2,812,899 95	
Fisheries—			
Building fishways and clearing rivers	19,275 46		
Conservation and development of deep sea fisheries and the demand for fish	113,582 73		
Fish culture	434,471 58		
Fisheries Intelligence Bureau	743 42		
Fishing Bounty	151,411 20		
Inspection of canned and pickled fish	28,069 67		
Investigation into the life history of the Pacific halibut	36,419 29		
Legal and incidental expenses	5,203 95		
Marine Biological Board of Canada	200,100 00		
Oyster culture	9,921 34		
Payment of a bounty for the destruction of hair seals in tidal waters	24,997 00		
Salaries and disbursements of Fishery Officers and Guardians, Fisheries Patrol and Fisheries Protection Service	949,922 70		
		1,974,118 34	
Scientific Institutions—			
Meteorological Service		287,908 21	
Steamboat Inspection		141,485 39	
Carried forward		9,482,572 20	

SCHEDULES OF ORDINARY EXPENDITURE, 1928-29—*Continued*

—	$ cts.	$ cts.	$ cts.
Brought forward	.....	9,482,572 20	
SCHEDULE No. 9—*Concluded*			
Marine and Fisheries—Concluded			
Miscellaneous—			
Repayment to the insurance adjustors of the proceeds from a sale of cargo which was washed ashore from the steamer *Brockton* and disposed of to the credit of the Receiver General	2,473 73		
Gratuities	3,074 47		
		5,548 20	
			9,488,120 40
SCHEDULE No. 10			
Mines—			
Civil Government—Salaries	.....	570,903 62	
Contingencies	.....	6,416 85	
			577,320 47
Geological Survey—			
Explorations, surveys and investigations	204,939 97		
Publications of reports, etc	49,936 71		
Maintenance of offices and museum, etc	57,975 25		
Museum equipment	14,610 35		
Purchase of specimens	2,299 09		
		329,761 37	
Mines Branch—			
Compensation to J. H. Fortune, caretaker of Mines Branch Building	400 00		
Investigation of mineral resources, ore deposits, etc	199,581 18		
Operation of Peat Bog at Alfred, Ontario	45,024 12		
Organization and equipment of Explosives Division	11,999 99		
Publication of reports, etc	44,706 50		
Payment of expenses in connection with the movement of coal from Alberta to Ontario and from Nova Scotia and New Brunswick to Quebec and Ontario	23,318 27		
Transportation charges on ore shipments	637 50		
Dominion of Canada Assay Office—Maintenance	23,749 82		
		349,417 38	
			679,178 75
Miscellaneous—			
Grant to the Canadian Institute of Mining and Metallurgy	.....	3,000 00	
Grant to the Imperial Institute	.....	12,848 00	
Gratuities	.....	230 00	
			16,078 00
			1,272,577 22
SCHEDULE No. 11			
National Defence—			
Civil Government—Salaries	.....	715,631 14	
Contingencies	.....	59,816 30	
			775,447 44
Militia Services—			
Administration	304,367 00		
Aid to Civil Power	6 80		
Cadet Services	499,979 47		
Contingencies	39,003 64		
Engineer Services and Works	828,584 65		
General stores	887,327 57		
Manufacturing Establishments	586,935 76		
Non-Permanent Active Militia	2,314,821 04		
Permanent Force	4,951,524 30		
Royal Military College	372,101 11		
Topographical Survey	44,988 34		
Transport and freight	214,693 97		
		11,044,333 65	
Naval Service—			
Maintenance	.....	1,836,487 65	
Carried forward	.....	12,880,821 30	775,447 44

SCHEDULES OF ORDINARY EXPENDITURE, 1928-29—*Continued*

	$ cts.	$ cts.	$ cts.
Brought forward		12,880,821 30	775,447 44
SCHEDULE No. 11—*Concluded*			
National Defence—Concluded			
Air Services—			
Royal Canadian Air Force—Maintenance, operation and training	1,697,653 23		
Civil Air Operations—Flying operations for other Government Departments, control of civil aviation and establishment of air routes, airship bases, etc	3,342,851 81		
		5,040,505 04	
General Services—			
Civil Pensions	1,415 42		
Construction of magazine, Halifax	99,819 64		
Compassionate grant to widow of late Alex. MacConnell	900 00		
Compassionate grant to Paul Andrews	500 00		
Compassionate grant to Joseph Henry Welch	100 00		
		102,735 06	
			18,024,061 40
Government of Northwest Territories—			
Mackenzie Basin System—Radio Services			138,715 40
Miscellaneous—			
Battlefields Memorials		160,872 83	
Imperial War Graves Commission		573,697 89	
Gratuities		1,405 66	
			735,976 38
			19,674,200 62
SCHEDULE No. 12			
National Revenue—			
Civil Government—Salaries	621,148 92		
Contingencies	28,369 75		
		649,518 67	
Salaries and Contingencies	7,229,645 61		
Inspectors, preventive service and Board of Customs	1,007,689 76		
Maintenance of revenue cruisers and preventive service	1,650,133 38		
Miscellaneous	599,781 56		
Secret preventive service	54,810 67		
Administration of the Business Profits War Tax Act, 1916, and the Income War Tax Act, 1917, and amendments	2,124,910 37		
Remission of Excise Tax paid on automobiles remaining in the hands of dealers and unsold at the time when such tax was repealed	150,256 78		
Payments to Messrs. Clarkson, Gordon, Dilworth, Guilfoyle and Nash for services in connection with the investigation and prosecution of breweries	15,000 00		
Compassionate allowance to widow of—			
C. E. Macdonald	500 00		
Wm. G. Hughes	500 00		
Turner Ingalls	500 00		
Exchequer Court Award—Seizure of schooner *Nellie J. Banks*	6,250 00		
Gratuities in lieu of leave on retirement	36,782 19		
		12,876,760 32	
Miscellaneous—			
Gratuities		16,155 59	
			13,542,434 58
SCHEDULE No. 13			
Pensions—			
Judges		201,771 49	
Militiamen, Rebellion of 1885 and generally		29,653 41	
Militia Pensions Act of 1901		873,123 74	
Pensions payable to Mounted Police, Prince Albert Volunteers and Police Scouts on account of the Rebellion of 1885		897 55	
Carried forward		1,105,446 19	

SCHEDULES OF ORDINARY EXPENDITURE, 1928-29—*Continued*

—	$ cts.	$ cts.	$ cts.
Brought forward		1,105,446 19	
SCHEDULE No. 13—*Concluded*			
Pensions—Concluded			
Annuity to the Right Honourable W. S. Fielding		10,000 00	
Annuity to Dr. F. G. Banting		8,125 00	
Annuity to Dr. Charles E. Saunders		5,000 00	
Annuity to Robinson Russell Farrow		2,853 53	
Annuity to Dougald Carmichael		499 92	
Civil Flying		240 00	
European War and Active Militia		40,047,757 21	
Salaries of the Board of Pension Commissioners		18,999 96	
Board of Pension Commissioners for Canada—Salaries and Contingencies		90,319 73	
Mounted Police (Statutory)		146,915 01	
Salaries—Chairman and four members of the Federal Appeal Board		34,741 94	
Pensions to families of members of the Force who lost their lives whilst on duty		4,402 31	
Pensions to—			
The unmarried sister of the late Col. Harry Baker, M.P		699 96	
J. Langlois Bell		600 00	
Captain J. E. Bernier		2,400 00	
Mrs. Jean Laird Farrell		550 00	
James Elliott		672 00	
Mrs. Violet L. Jenkin		600 00	
Mrs. Alice Joynson		499 92	
Mrs. Wm. McDougall		1,300 00	
Alice Morson Smith		600 00	
J. L. Weller		3,500 00	
Mrs. Beatrice Williams		600 00	
			41,487,322 68
SCHEDULE No. 14			
Post Office—			
Civil Government—Salaries	1,292,414 10		
Contingencies	156,118 65		
		1,448,533 05	
Salaries and Allowances	17,166,588 76		
Mail Service	15,007,540 14		
Miscellaneous	1,159,762 11		
Yukon Territory	149,167 49		
		33,483,058 50	
Miscellaneous—			
Gratuities		17,958 25	
			34,949,549 80
SCHEDULE No. 15			
Public Works—			
Civil Government—Salaries	657,745 72		
Contingencies	74,580 31		
		732,326 03	
Construction, Maintenance, Repairs, etc. (Appendix No. 11)—			
Public Buildings	9,050,386 73		
Harbours and Rivers	4,801,408 19		
Dredging	1,450,332 70		
Roads and Bridges	36,284 36		
Telegraph and Telephone Lines	170,308 83		
Miscellaneous	905,612 33		
Subsidies to Dry Docks	588,921 34		
		17,003,254 48	
Collection of Revenue (Appendix No. 11)—			
Sundry Works	216,406 14		
Telegraph and Telephone Lines	723,579 18		
		939,985 32	
Miscellaneous—			
Gratuities		9,396 42	
			18,684,962 25

SCHEDULES OF ORDINARY EXPENDITURE, 1928-29—*Continued*

	$ cts.	$ cts.	$ cts.
SCHEDULE No. 16			
Railways and Canals—			
Civil Government—Salaries		270,150 46	
Contingencies		38,407 40	
			308,557 86
Chargeable to Income—			
Canals—			
Bakers Dam—Improvements	25,606 59		
Carillon-Grenville—Improvements	3,083 06		
Lachine—Improvements	66,131 94		
Port Colborne Elevator—Improvements	23,563 95		
Soulanges—Improvements	6,822 84		
St. Anne's Lock—Improvements	5,796 36		
Ontario—St. Lawrence Canals—Improvements	15,884 94		
Trent Canal—Improvements	124,806 10		
Welland Canal—Improvements	22,421 53		
Surveys and Inspections—Canals	6,174 44		
		300,291 75	
Railways—			
Board of Railway Commissioners for Canada—			
Salaries—Statutory	49,542 97		
Maintenance and operation	284,448 12		
Governor General's Cars—Repairs, etc	2,399 60		
Supplement to Pension allowance payable under the provisions of the Intercolonial and Prince Edward Island Railway Employees Provident Fund	36,360 15		
		372,750 84	
Maritime Freight Rates Act, 1927—			
Difference between tariff tolls and the normal tolls on all traffic moved during 1928	828,893 16		
Canadian National Railway Company, deficit in receipts and revenues of the Eastern Lines during 1928	1,930,000 00		
Canadian National Railway Company, deficit in receipts and revenues of the Eastern Lines, as defined in the Maritime Freight Rates Act, during 1928, less the portion of such deficit occurring on account of the application of the said Act	4,418,644 50		
		7,177,537 66	
Miscellaneous—			
Printing and Stationery	5,120 02		
Government Employees Compensation Act	402,251 81		
Miscellaneous Services, including salaries and expenses of experts employed temporarily	36,961 45		
Compassionate allowance to widow of late Charles Hilden	3,000 00		
		447,333 28	
			8,297,913 53
Chargeable to Collection of Revenue—			
Canals—			
Staff and repairs			2,405,272 18
Miscellaneous—			
St. Lawrence Ship Canal, surveys and investigations including the Canadian National Advisory Council		30,272 15	
Gratuities		5,871 59	
			36,143 74
			11,047,887 31
SCHEDULE No. 17			
Royal Canadian Mounted Police—			
Civil Government—Salaries	40,322 67		
Contingencies	6,569 83		
		46,892 50	
Pay of Force	1,092,330 80		
Subsistence, billeting and travelling expenses, forage, fuel, light, etc	1,421,435 19		
Compensation to members of the Force for injuries received whilst in the performance of duty	8,047 54		
Carried forward	2,521,813 53	46,892 50	

SCHEDULES OF ORDINARY EXPENDITURE, 1928-29—*Continued*

—	$ cts.	$ cts.	$ cts.
Brought forward	2,521,813 53	46,892 50	
SCHEDULE No. 17—*Concluded*			
Royal Canadian Mounted Police—Concluded			
Enforcement of the Federal Statutes	46,054 57		
Special services *re* enforcement of the Opium and Narcotic Drug Act	32,657 00		
		2,600,525 10	
Miscellaneous—			
Grant to the Chief Constables Association of Canada	500 00		
To assist in the Suppression of the White Slave Traffic	4 00		
		504 00	
			2,647,921 60
SCHEDULE No. 18			
Pensions and National Health—			
Civil Government—Salaries	206,822 35		
Contingencies	59,822 20		
		266,644 55	
Care of patients and medical examination of pensioners	2,441,268 49		
Employers' Liability Compensation	19,672 04		
Federal Appeal Board and District Boards of Review	123,780 56		
Interest on Funds	10,557 59		
Operating expenses and working capital	271,052 46		
Pay and allowances	1,814,326 32		
Salaries—Administrative, clerical, dental, technical, etc.	2,672,785 27		
Sheltered employment	158,790 92		
Unemployment relief	378,987 86		
Vocational Loans	735 96		
Grant to the Dominion Executive Council of the Canadian Legion, British Empire Service League	10,000 00		
		7,901,957 47	
Health—			
Administration of the Acts respecting Food and Drugs, Maple Products, Opium and Narcotic Drugs and Proprietary or Patent Medicines	129,999 95		
Immigration Medical Inspection	268,147 41		
Laboratory of Hygiene	4,956 44		
Marine Hospitals	209,999 80		
Quarantine	200,000 00		
Pollution of Inland Waters	11,993 72		
Venereal Diseases	98,905 20		
		924,002 52	
Miscellaneous—			
Canadian Social Hygiene Council	20,000 00		
Canadian National Committee for Mental Hygiene	20,000 00		
Canadian Council on Child Welfare	10,000 00		
Canadian Tuberculosis Association	25,000 00		
Canadian Dental Hygiene Council	5,000 00		
Gratuities	4,097 76		
		84,097 76	
			9,176,702 30
SCHEDULE No. 19			
Soldier and General Land Settlement—			
Administration, Soldier Land Settlement		802,594 90	
Administration, General Land Settlement		639,355 65	
			1,441,950 55
SCHEDULE No. 20			
Trade and Commerce—			
Civil Government—Salaries		513,475 27	
Contingencies		29,899 15	
			543,374 42
British and Foreign News Service	32,000 00		
Canada Grain Act—Administration	1,856,202 06		
Canadian Government Motion Picture Bureau	49,943 63		
Commercial Intelligence Service	495,183 92		
Carried forward	2,433,329 61		543,374 42

SCHEDULES OF ORDINARY EXPENDITURE, 1928-29—*Continued*

—	$ cts.	$ cts.	$ cts.
Brought forward	2,433 329 61		543,374 42
SCHEDULE No. 20—*Continued*			
Trade and Commerce—Continued			
Copper Bounties Act—Administration	250 00		
Dominion Bureau of Statistics	129,694 75		
Elevators—Management, operation and maintenance	430,384 38		
Elevators—Equipment	16,056 35		
Electricity and Fluid Exportation Act—Administration	283 81		
Exhibitions—Salaries and contingencies	295,038 32		
Exhibition Building, London, England	70,729 42		
Gas and Electricity Inspection	203,827 51		
Gold and Silver Marking Act—Administration	4,919 29		
Honorary Advisory Council for Industrial and Scientific Research	299,745 68		
International Customs Tariffs Bureau	665 52		
Printing of Parliamentary and Departmental Publications	114,542 25		
Publicity and Advertising in Canada	49,890 80		
Publicity and Advertising in the British Empire	100,000 00		
Weights and Measures Inspection	326,773 18		
		4,476,130 87	
Bounties—			
Copper Bars	68,864 40		
Hemp	10,425 70		
		79,290 10	
			4,555,420 97
Mail Subsidies and Steamship Subventions—			
Atlantic Ocean—			
Canada and South Africa	124,999 92		
Eastern Canada and Brazil, Uruguay and the Argentine Republic	100,000 00		
		224,999 92	
Pacific Ocean—			
Canada and New Zealand	103,183 25		
Prince Rupert, B.C., and Queen Charlotte Island	21,000 00		
Victoria, Vancouver, wayports and Skagway	25,000 00		
Victoria and West Coast of Vancouver Island	15,000 00		
Vancouver and Northern Ports of British Columbia	24,800 00		
Vancouver and Ports on Howe Sound	5,000 00		
Vancouver and the British West Indies	27,000 00		
		220,983 25	
Local Services—			
Baddeck and Iona	10,500 00		
Charlottetown and Pictou	35,000 00		
Charlottetown, Victoria and Halliday's Wharf	5,000 00		
Dalhousie, N.B., and Carleton, Que	3,000 00		
Grand Manan and the Mainland	20,000 00		
Halifax, Canso and Guysboro	9,000 00		
Halifax, La Have and La Have River Ports	5,538 47		
Halifax, Spry Bay and Cape Breton Ports	6,000 00		
Halifax and Bay St. Lawrence	2,400 00		
Halifax, South Cape Breton and Bras d'Or Lake Ports	5,000 00		
Halifax and Sherbrooke	1,500 00		
Halifax and West Coast Cape Breton	6,000 00		
Mainland and Islands of Miscou and Shippegan	2,000 00		
Mulgrave, Arichat and Petit de Grat	12,868 25		
Mulgrave and Canso	27,400 00		
Mulgrave and Guysboro	14,000 00		
Murray Bay, Havre St. Pierre and other ports on north shore of the St. Lawrence River	32,900 00		
Newcastle, Neguac and Escuminac	4,500 00		
Parrsboro, Kingsport and Wolfville	5,000 00		
Pelee Island and the Mainland	10,999 98		
Pictou, Mulgrave and Cheticamp	11,000 00		
Pictou, Souris and the Magdalen Islands	50,000 00		
Pictou, Newcastle and Antigonish County Ports	1,000 00		
Port Mulgrave, St. Peter's, Irish Cove and Marble Mountain	10,350 00		
Carried forward	290,956 70	445,983 17	5,098,795 39

SCHEDULES OF ORDINARY EXPENDITURE, 1928-29—*Continued*

—	$ cts.	$ cts.	$ cts.
Brought forward	290,956 70	445,983 17	5,098,795 39
SCHEDULE No. 20—*Concluded*			
Trade and Commerce—Concluded			
Mail Subsidies and Steamship Subventions—Concluded			
Local Services—Concluded			
Quebec, Natashquan and Harrington	85,000 00		
Quebec or Montreal and Gaspe	60,000 00		
Rimouski and Pointe aux Outardes	10,000 00		
Riviere du Loup and Tadoussac and other north shore ports	15,000 00		
St. Catherine's Bay and Tadoussac	4,663 27		
St. John and Bear River	2,000 00		
St. John and Bridgetown	1,000 00		
St. John and Digby	15,000 00		
St. John, Digby, Annapolis and Granville	2,000 00		
St. John, Margaretville and other Bay of Fundy ports	4,500 00		
St. John and St. Andrews	4,000 00		
St. John, Westport and Yarmouth	17,999 80		
St. John and Minas Basin ports	5,000 00		
St. John and Weymouth	1,500 00		
St. John and Centreville	764 66		
Summerville, Burlington and Windsor	500 00		
Sydney and Bras d'Or Lake ports	18,000 00		
Sydney and Bay St. Lawrence	18,000 00		
Sydney and Whycocomagh	16,000 00		
Trois Pistoles and Les Escoumains	1,000 00		
Grant to the Province of British Columbia for the improvement of the Mail Service on inland waters in that Province	3,000 00		
Inspection of subsidized steamship services	4,507 54		
		580,391 97	
			1,026,375 14
Miscellaneous—			
Gratuities			1,804 40
			6,126,974 93
SCHEDULE No. 21			
Other Departments—			
Archives—			
Civil Government—Salaries	70,519 68		
Contingencies	17,966 25		
		88,485 93	
Miscellaneous—			
Public Archives	100,649 46		
Gratuities	160 00		
		100,809 46	
			189,295 39
Auditor General's Office—			
Civil Government—Salaries		342,686 50	
Contingencies		57,855 70	
			400,542 20
Civil Service Commission—			
Civil Government—Salaries		223,670 87	
Contingencies		44,556 36	
			268,227 23
External Affairs—			
Civil Government—Salaries	118,669 84		
Contingencies	39,953 01		
		158,622 85	
Miscellaneous—			
Canadian Delegation to the League of Nations	20,968 18		
Canadian Representation in the U.S.A.	99,771 06		
Canadian Representation at Geneva	16,970 78		
Canadian Representation at Tokyo	47,687 88		
Paris Agency	74,122 44		
Passport Office	22,966 73		
Carried forward	282,487 07	158,622 85	858,064 82

SCHEDULES OF ORDINARY EXPENDITURE, 1928-29—*Continued*

	$ cts.	$ cts.	$ cts.
Brought forward	282,487 07	158,622 85	858,064 82
SCHEDULE No. 21—*Concluded*			
Other Departments—Concluded			
External Affairs—Concluded			
Miscellaneous—Concluded			
Contribution to the League of Nations including secretariat	155,568 18		
Publications of the League of Nations for Members of Parliament	3,000 00		
International Joint Commission	36,513 73		
Unforeseen expenses	6,021 06		
		483,590 04	
			642,212 89
High Commissioner's Office—			
Civil Government—Salaries		49,240 00	
Contingencies		57,762 39	
			107,002 39
Insurance—			
Civil Government—Salaries	87,844 80		
Contingencies	58,991 32		
		146,836 12	
Miscellaneous—			
Expenses of work in the interest of fire prevention		8,772 51	
			155,608 63
Office of the Secretary to the Governor General—			
Civil Government—Salary: The Governor General	48,666 66		
Salaries: Office of the Secretary to the Governor General	34,600 85		
Contingencies	71,363 99		
		154,631 50	
Miscellaneous—			
Gratuities		178 34	
			154,809 84
Printing and Stationery—			
Civil Government—Salaries	79,855 97		
Contingencies	14,937 54		
		94,793 51	
Canada Gazette	34,907 92		
Distribution of Parliamentary Documents	49,789 37		
Plant—New	17,270 15		
Plant repairs and renewals	29,791 11		
Printing, binding, etc., the Annual Statutes	10,000 00		
Printing and binding Government Publications for sale and distribution to Departments and the Public	36,724 60		
Printing, binding and distributing the Revised Statutes of Canada, 1927	17,248 97		
		195,732 12	
Miscellaneous—			
Gratuities		242 67	
			290,768 30
Privy Council—			
Civil Government—Salaries	50,771 00		
Contingencies	4,053 64		
		54,824 64	
Miscellaneous—			
Unforeseen Expenses		4,032 32	
			58,856 96
Secretary of State—			
Civil Government—Salaries	319,308 57		
Contingencies	64,394 58		
		383,703 15	
Miscellaneous—			
Expenses under the Naturalization Acts	9,648 11		
Expenses under the Canada Temperance Act	1,742 43		
Patent Record	29,748 65		
International Copyright Union Office	1,162 20		
Gratuities	270 00		
		42,571 39	
			426,274 54
			2,693,598 37

SCHEDULES OF ORDINARY EXPENDITURE, 1928-29—*Concluded*

—	$ cts.	$ cts.	$ cts.
SCHEDULE No. 22			
Miscellaneous—			
Grants and Contributions to the—			
Canadian Branch of the St. John Ambulance Association	5,000 00		
Canadian General Council of the Boys Scouts Association	15,000 00		
Canadian National Institute for the Blind	15,000 00		
Canadian National Safety League	10,000 00		
Corporation of the City of Ottawa	100,000 00		
Dominion Council of the Girl Guides	6,000 00		
Interparliamentary Union for Peace	400 00		
Montreal Association for the Blind	5,000 00		
National Battlefields Commission	75,000 00		
Federal District Commission—Annual Grant	212,500 00		
Federal District Commission—Capital Expenditure	2,189,960 20		
Royal Astronomical Society	2,000 00		
Royal Canadian Academy of Arts	2,500 00		
Royal Society of Canada	8,000 00		
Victorian Order of Nurses	10,000 00		
l'Institute Nazareth de Montreal—to assist in work with the Blind	5,000 00		
To assist in erecting at St. Hyacinthe an arch to commemorate the hundredth anniversary of the birth of Senator Dessaulles	500 00		
British West Indies—Hurricane Relief	25,000 00		
		2,686,860 20	
Empire Parliamentary Association—Visit to Canada		74,698 33	
Empire Parliamentary Association—Subscription to Publications		2,000 00	
Government Contracts Supervision Committee		19,120 73	
Home Bank Creditors Relief		460,000 00	
Grants, pending consideration of Provincial Subsidies to Province of—			
Nova Scotia	875,000 00		
New Brunswick	600,000 00		
Prince Edward Island	125,000 00	1,600,000 00	
Negotiation of Treaties		4,493 66	
Salaries and expenses of the advisors engaged in Tariff Enquiry		77,454 88	
Salary of Hon. J. C. Patterson, Commissioner to investigate titles of Great Britain to lands in the Arctic Seas		2,200 00	
			4,926 827 80

SCHEDULES OF SPECIAL EXPENDITURE, 1928-29

—	$ cts.	$ cts.	$ cts.
SCHEDULE No. 23			
Adjustment of War Claims—			
National Defence—Militia		112,492 20	
Naval		1,060 99	
Secretary of State		6,294 55	
			119,847 74
SCHEDULE No. 24			
Cost of Loan Flotations—			
Commission of 1/6 of one per cent paid to banks for redemption of matured bonds—			
5½% Victory Loan 1917 due 1922	11 44		
5½% Victory Loan 1918 due 1923	18 93		
5½% Victory Loan 1919 due 1924	34 53		
5% War Loan 1915 due 1925	42 44		
		107 34	
5½% Renewal Loan 1922—			
Advertising		35 28	
5½% Renewal Loan 1922—Redemption 1927—			
Clerical assistance		1,039 51	
5% Refunding Loan 1923—Redemption 1928—			
Clerical assistance	1,322 79		
Printing	133 22		
		1,456 01	
5½% Bond Loan 1919-29 New York—			
Premium on bonds purchased before maturity	6,250 90		
Brokerage and Commission	2,441 17		
		8,692 07	
			11,330 21
SCHEDULE No. 25			
Miscellaneous Charges—			
Home Bank Depositors' Relief Act, 15-16, Geo. V, Chap. 45		17,108 95	
Civil Service Superannuation Act 1924, Chap. 24, R.S. 1927 (Government contribution to the Fund)		1,681,700 44	
Government Annuities—Amount required to meet the value of the prospective annuities contracted for up to March 31, 1929		132,844 13	
Railway Grade Crossing Fund—9-10 Geo. V, Chap. 30		224,169 33	
			2,055,822 85
SCHEDULE No. 26			
Non-Active Accounts written off and charged to Consolidated Fund—			
Soldier Land Settlement Loans, Indian Lands		22,771 10	
Soldier Land Settlement Loans—Revaluation of live stock and land revaluations		2,630,491 54	
Southern Alberta Land Company		50,899 78	
Canada Land and Irrigation Company		329,573 96	
Seed Grain and Relief Accounts		745,496 23	
Seed Grain and Relief Accounts, Interior Department		31,311 38	
			3,810,543 99

COMPARATIVE SCHEDULES OF ORDINARY REVENUE FOR THE FISCAL YEARS 1927-28 AND 1928-29

	1927-28		1928-29	
	$ cts.	$ cts.	$ cts.	$ cts.
SCHEDULE No. 27				
National Revenue—				
Customs Import Duties—				
Alberta	4,203,993 74		5,748,578 93	
British Columbia	16,314,143 18		16,978,615 42	
Manitoba	9,437,559 55		10,881,695 71	
New Brunswick	4,004,245 19		3,793,843 75	
Nova Scotia	3,514,903 81		3,512,967 33	
Ontario	85,960,295 36		103,680,807 69	
Prince Edward Island	186,619 58		159,533 27	
Quebec	44,528,477 87		50,158,462 31	
Saskatchewan	3,627,712 60		5,449,643 81	
Yukon	82,551 67		105,643 74	
Department of National Revenue	8 75			
British P.O. Parcels	8,447 46		9,043 58	
	171,868,958 76		200,478,835 54	
LESS—Returned Duties and Drawbacks	14,883,141 11		13,272,503 07	
		156,985,817 65		187,206,332 47
Excise Duties—				
Alberta	652,506 31		800,119 08	
British Columbia	1,935,809 28		1,775,112 23	
Manitoba	819,200 30		856,993 48	
New Brunswick	250,108 02		218,562 49	
Nova Scotia	37,298 22		49,799 53	
Ontario	15,142,798 91		17,522,692 75	
Prince Edward Island	38,558 96		36,589 00	
Quebec	38,617,252 40		42,462,275 52	
Saskatchewan	566,944 22		636,579 90	
Yukon Territory	1,608 75		1,379 27	
	58,062,085 37		64,360,103 25	
LESS—Refunds	661,187 91		675,149 53	
		57,400,897 46		63,684,953 72
Sales Tax, Tax on Cheques, Transportation Tax, etc.—				
Sales	72,100,244 12		63,646,671 22	
Manufactures	12,108,798 19		13,425,848 01	
Stamps, including cheques embossed	4,735,439 59		4,071,222 10	
Transportation	2,534,081 78		2,647,801 39	
Licenses, penalties and interest	182,622 06		222,623 06	
	91,662,085 74		84,014,165 78	
LESS—Refunds, etc	1,439,154 42		1,006,883 00	
		90,222,931 32		83,007,282 78
Taxation Branch—				
Income Tax	56,571,047 39		59,422,323 23	
Business Profits Tax	956,031 44		455,232 27	
Trust and Loan Companies	345,429 85		7,640 88	
		57,872,508 68		59,885,196 40
Sundry Collections—				
Casual Revenue (Appendix No. 14)	430,303 42		453,796 48	
Fines and Forfeitures (Appendix No. 15)	423,843 94		437,184 72	
Premium, Discount and Exchange	21 54		0 40	
		854,168 90		890,981 60
		363,336,324 01		394,674,746 97
SCHEDULE No. 28				
Finance—				
Chartered Banks		1,224,644 46		1,242,398 99
Insurance Companies		999,003 34		894,863 98
Interest on Investments (Appendix No. 13)—				
Interest on Sinking Funds	1,660,992 47		1,744,687 29	
Loans to Banks	524,202 29		1,671,907 71	
Loans to Provinces	1,054,277 25		663,518 21	
Advances to Foreign Governments	1,640,320 52		1,320,280 00	
Carried forward	4,879,792 53	2,223,647 80	5,400,393 21	2,137,262 97

COMPARATIVE SCHEDULES OF ORDINARY REVENUE FOR THE FISCAL YEARS 1927-28 AND 1928-29—*Continued*

	1927-28		1928-29	
	$ cts.	$ cts.	$ cts.	$ cts.
Brought forward	4,879,792 53	2,223,647 80	5,400,393 21	2,137,262 97
SCHEDULE No. 28—*Concluded*				
Finance—Concluded				
Interest on Investments—Concluded				
Canadian Government Merchant Marine	12,599 92		5,334 38	
Montreal Harbour Debentures	2,849,604 65		2,023,448 94	
Vancouver Harbour Debentures	723,331 97		827,566 23	
Chicoutimi Harbour Debentures			5,318 48	
St. John Harbour Denbentures			2,847 12	
Seed Grain and Relief Advances	119,741 85		160,100 87	
Soldier and General Land Settlement Advances	2,069,623 01		1,959,717 04	
Miscellaneous	283,128 45		1,842,835 60	
		10,937,822 38		12,227,561 87
Sundry Collections—				
Casual Revenue (Appendix No. 14)	451,902 24		519,232 12	
Fines and Forfeitures	625 00			
Premium, Discount and Exchange	593,752 57		568,496 21	
		1,046,279 81		1,087,728 33
		14,207,749 99		15,452,553 17
SCHEDULE No. 29				
Interior—				
Dominion Lands—				
Canadian National Parks	275,229 34		234,538 92	
Coal Lands	415,532 65		421,759 95	
Export Tax on Gold	14,205 55		16,366 79	
Forestry Branch, sale of trees, etc	18,687 62		16,927 92	
Fur Sales	22,271 00		28,338 87	
General sales	91,381 39		85,905 39	
Grazing lands rentals, fees and improvements	174,279 92		187,116 75	
Hay permits	13,449 04		9,195 62	
Homestead (permits) Fees	72,551 00		161,890 00	
Improvements	46,736 39		65,461 51	
Irrigation sales	11,031 70		13,055 16	
Map sales, office fees, etc	34,467 59		30,053 15	
Mining fees	127,580 00		238,279 25	
Petroleum	298,445 99		391,855 98	
Pre-emption sales under Act of 1908	597,250 13		657,211 44	
Purchased homestead sales	32,660 54		29,489 30	
Rent of water power	50,417 00		67,224 26	
Rentals of land	18,939 05		27,502 43	
Quarrying leases	7,400 27		11,430 96	
Timber dues	1,388,140 48		1,395,725 57	
Trappers and Traders licenses	19,427 00		22,715 67	
Suspense account	2,888 07		1,969 09	
Miscellaneous	29,956 84		38,265 33	
	3,762,928 56		4,152,279 31	
LESS—Refunds	74,333 97		81,939 94	
		3,688,594 59		4,070,339 37
Ordnance Lands		14,205 88		24,830 09
Casual Revenue (Appendix No. 14)		12,246 08		20,077 33
Fines and Forfeitures (Appendix No. 15)		3,622 98		3,334 93
		3,718,669 53		4,118,581 72
SCHEDULE No. 30				
Marine and Fisheries—				
Fisheries—				
Alberta	18,364 50		17,869 50	
British Columbia	47,628 84		35,426 13	
Manitoba	22,434 00		23,332 50	
Carried forward	88,427 34		76,628 13	

COMPARATIVE SCHEDULES OF ORDINARY REVENUE FOR THE FISCAL YEARS 1927-28 AND 1928-29—*Continued*

	1927-28		1928-29	
	$ cts.	$ cts.	$ cts.	$ cts.
Brought forward	88,427 34		76,628 13	
SCHEDULE No. 30—*Concluded*				
Marine and Fisheries—Concluded				
Fisheries—Concluded				
New Brunswick	11,062 50		11,177 45	
Nova Scotia	10,517 75		11,363 25	
Prince Edward Island	2,887 75		2,700 50	
Saskatchewan	5,750 25		8,136 00	
Yukon	505 00		415 00	
	119,150 59		110,420 33	
LESS—Refunds	7 00		1,120 10	
		119,143 59		109,300 23
Harbour Dues		2,163 71		2,146 70
Wharves and Piers		55,638 92		43,731 01
Dominion Steamers		5,909 04		
Steamboat Inspection		127,851 95		136,932 03
Casual Revenue (Appendix No. 14)		523,573 99		564,469 79
Fines and Forfeitures (Appendix No. 15)		15,648 61		17,901 27
Premium, Discount and Exchange		14 25		312 30
		849,944 06		874,793 33
SCHEDULE No. 31				
Patent and Copyright Office—				
Patent Fees—				
Assignments	16,800 61		20,278 77	
Caveats	2,031 75		1,798 65	
Certified Copies	11,859 97		12,033 66	
Patents	371,491 88		391,618 59	
Petition under Section 17, etc	45 00		10 00	
Reinstatement of Application	555 00		510 00	
Restoration of Patent	3,226 65		2,925 00	
Revival of Patent	1,815 00		1,085 00	
Subscriptions to Record	4,254 38		4,185 07	
Sundries	59 30		53 17	
		412,139 54		434,497 91
Trademarks and Copyrights—				
Assignments	3,124 25		3,213 35	
Certified Copies	687 65		700 15	
Copyrights	9,172 85		9,742 70	
Designs	2,895 50		2,933 50	
Timbermarks	28 00		19 50	
Trademarks	67,744 05		79,131 83	
		83,652 30		95,741 03
Casual Revenue (Appendix No. 14)				145 25
		495,791 84		530,384 19
SCHEDULE No. 32				
Post Office—				
Postage, Commission on Money Orders, etc		31,562,580 03		30,611,963 69
Casual Revenue (Appendix No. 14)		3,624 49		16,373 21
Fines and Forfeitures (Appendix No. 15)		1,013 97		538 00
		31,567,218 49		30,628,874 90
SCHEDULE No. 33				
Public Works—				
Ferries	1,361 00		1,358 00	
Graving Docks	97,305 12		112,064 78	
Slides and Booms	16 79			
Telegraphs	296,598 07		300,662 27	
		395,280 98		414,085 05
Carried forward		395,280 98		414,085 05

COMPARATIVE SCHEDULES OF ORDINARY REVENUE FOR THE FISCAL YEARS 1927-28 AND 1928-29—*Continued*

	1927-28		1928-29	
	$ cts.	$ cts.	$ cts.	$ cts.
Brought forward		395,280 98		414,085 05
SCHEDULE No. 33—*Concluded*				
Public Works—Concluded				
Casual Revenue (Appendix No. 14)		191,371 30		226,160 56
Fines and Forfeitures (Appendix No. 15)		700 00		137 50
Premium, Discount and Exchange — International Joint Commission				1 90
		587,352 28		640,385 01
SCHEDULE No. 34				
Railways and Canals—				
Canals—				
Beauharnois	15,075 31		9,075 31	
Carillon and Grenville	637 00		946 00	
Chambly	1,015 74		1,067 58	
Chats Falls	1 00		1 00	
Cornwall	26,164 80		26,206 32	
Lachine	234,381 27		258,054 19	
Murray	232 14		254 00	
Port Colborne Elevator	614,466 25		581,113 44	
Rideau	12,562 51		12,223 86	
Sault Ste. Marie	139 00		187 00	
Soulanges	4,203 89		4,235 41	
St. Anne's Lock and Canal	648 64		577 00	
St. Peters	73 00		116 00	
Trent	95,708 02		95,378 03	
Welland	346,289 07		236,615 27	
Welland Ship Canal	2,013 32		2,430 64	
Williamsburg	2,006 50		1,802 50	
Miscellaneous	60 00		49 00	
		1,355,677 46		1,230,332 55
Casual Revenue (Appendix No. 14)		173,175 01		160,921 14
Fines and Forfeitures (Appendix No. 15)		27 00		47 00
		1,528,879 47		1,391,300 69
SCHEDULE No. 35				
Trade and Commerce—				
Electric Light Inspection—				
Inspection Fees	189,399 20		211,955 05	
Electrical Standards Laboratory Fees	162 25		225 50	
Export licenses, electric power	675 00		675 00	
Export Tax, electric power	373,676 21		351,108 78	
		563,912 66		563,964 33
Gas Inspection—				
Alberta	4,457 60		5,381 60	
British Columbia	6,737 00		7,258 40	
Manitoba	4,006 20		3,248 60	
New Brunswick	1,283 80		1,502 40	
Nova Scotia	639 60		650 80	
Ontario	47,154 20		49,331 10	
Quebec	21,437 20		25,025 00	
		85,715 60		92,397 90
Weights and Measures Inspection—				
Alberta	36,332 90		40,947 15	
British Columbia	13,478 05		13,811 20	
Manitoba	28,649 50		30,214 20	
New Brunswick	7,826 80		8,570 70	
Nova Scotia	8,796 75		10,792 50	
Ontario	137,844 10		149,935 55	
Prince Edward Island	2,180 65		2,282 20	
Quebec	74,856 50		85,355 85	
Saskatchewan	46,717 38		52,852 70	
Carried forward	356,682 63	649,628 26	394,762 05	656,362 23

COMPARATIVE SCHEDULES OF ORDINARY REVENUE FOR THE FISCAL YEARS 1927-28 AND 1928-29—*Continued*

	1927-28		1928-29	
	$ cts.	$ cts.	$ cts.	$ cts.
Brought forward	356,682 63	649,628 26	394,762 05	656,362 23
SCHEDULE No. 35—*Concluded*				
Trade and Commerce—Concluded				
Weights and Measures Inspection—Concluded				
Yukon	98 15		106 25	
Laboratory Fees	2,422 35		1,881 20	
Post Office Inspectors Fees	2,500 00		2,500 00	
	361,703 13		399,249 50	
LESS—Refunds	13 00		2 75	
		361,690 13		399,246 75
Canada Grain Act		2,677,877 52		2,992,540 59
Casual Revenue (Appendix No. 14)		23,170 18		69,925 53
Fines and Forfeitures (Appendix No. 15)		300 00		132 00
Premium, Discount and Exchange		1 80		
		3,712,667 89		4,118,207 10
SCHEDULE No. 36				
Other Departments—				
Agriculture—				
Casual Revenue (Appendix No. 14)	344,468 35		342,899 47	
Fines and Forfeitures (Appendix No. 15)	10,332 07		12,041 74	
		354,800 42		354,941 21
Archives—				
Casual Revenue (Appendix No. 14)		14 30		3 75
Civil Service Commission—				
Casual Revenue (Appendix No. 14)		10,417 25		5,410 00
External Affairs—				
Casual Revenue (Appendix No. 14)		145,202 71		141,130 96
Pensions and National Health—				
Mariners Fund—				
British Columbia	82,783 73		93,868 11	
New Brunswick	20,187 38		21,493 42	
Nova Scotia	51,606 28		52,919 40	
Prince Edward Island	1,340 54		1,151 14	
Quebec	67,365 53		68,117 38	
	223,283 46		237,549 45	
LESS—Refunds	1,235 38		741 50	
	222,048 08		236,807 95	
Casual Revenue (Appendix No. 14)	260,573 03		211,141 45	
Fines and Forfeitures (Appendix No. 15)	10,505 75		10,728 75	
Premium, Discount and Exchange	1 19			
		493,128 05		458,678 15
Immigration and Colonization—				
Chinese Immigration Tax	14,179 00		18,224 00	
Casual Revenue (Appendix No. 14)	9,100 11		39,736 95	
Fines and Forfeitures (Appendix No. 15)	76,042 19		72,730 00	
Premium, Discount and Exchange	25 46		32 38	
		99,346 76		130,723 33
Indian Affairs—				
Casual Revenue (Appendix No. 14)		19,824 00		9,250 84
Insurance—				
Insurance Inspection	123,767 85		131,626 08	
Casual Revenue	113 70			
Fines and Forfeitures	500 00			
		124,381 55		131,626 08
Carried forward		1,247,115 04		1,231,764 32

COMPARATIVE SCHEDULES OF ORDINARY REVENUE FOR THE FISCAL YEARS 1927-28 AND 1928-29—*Concluded*

	1927-28		1928-29	
	$ cts.	$ cts.	$ cts.	$ cts.
Brought forward		1,247,115 04		1,231,764 32
SCHEDULE No. 36—*Concluded*				
Other Departments—Concluded				
Justice—				
Penitentiaries—				
Alberta	4,477 00		4,077 65	
British Columbia	5,981 50		6,442 98	
Dorchester	20,614 08		19,686 89	
Kingston	90,178 34		88,641 40	
Manitoba	22,793 59		18,658 75	
Saskatchewan	13,247 09		13,168 43	
St. Vincent de Paul	20,641 89		27,772 63	
	177,933 49		178,448 73	
Casual Revenue (Appendix No. 14)	23,645 46		25,189 18	
Fines and Forfeitures (Appendix No. 15)	187 39		483 95	
Premium, Discount and Exchange			0 55	
		201,766 34		204,122 41
Labour—				
Casual Revenue (Appendix No. 14)	1,425 73		1,597 83	
Fines and Forfeitures (Appendix No. 15)	23,810 89		100,000 00	
		25,236 62		101,597 83
Legislation—				
Senate—				
Casual Revenue (Appendix No. 14)	31,010 07		36,034 65	
House of Commons—				
Casual Revenue (Appendix No. 14)	29,532 28		28,171 32	
		60,542 35		64,205 97
Mines—				
Casual Revenue (Appendix No. 14)	4,987 03		4,182 53	
Fines and Forfeitures (Appendix No. 15)	205 00		75 00	
		5,192 03		4,257 53
National Defence—				
Militia Pensions	128,016 62		155,829 93	
Royal Military College	20,232 00		20,204 00	
Casual Revenue (Appendix No. 14)	149,239 80		124,037 66	
Fines and Forfeitures (Appendix No. 15)	775 00		150 00	
Premium, Discount and Exchange	1 20		2 52	
		298,264 62		300,224 11
Public Printing and Stationery—				
Canada Gazette	81,242 62		80,213 96	
Casual Revenue (Appendix No. 14)	130,594 66		170,758 62	
		211,837 28		250,972 58
Pensions—				
Casual Revenue (Appendix No. 14)		26,741 51		57,433 64
Royal Canadian Mounted Police—				
Officers Pension Revenue	6,144 26		6,372 94	
Casual Revenue (Appendix No. 14)	9,419 71		88,285 98	
		15,563 97		94,658 92
Secretary of State—				
Casual Revenue (Appendix No. 14)		646,814 74		724,508 35
Soldier Settlement Board—				
Casual Revenue (Appendix No. 14)	486 49		220 00	
Premium, Discount and Exchange	393 26			
		879 75		220 00
Superannuation Revenue—				
(Appendix No. 17)		172 38		81 00
		2,740,126 63		3,034,046 66

SCHEDULES OF SPECIAL REVENUE, 1928-29

—	$ cts.	$ cts.	$ cts.
SCHEDULE No. 37			
War and Demobilization Receipts—			
Refunds of Previous Years' Expenditure—			
National Defence—Militia Services		730,080 20	
Naval Service		157 91	
Public Works		59,008 69	
			789,246 80
SCHEDULE No. 38			
Miscellaneous Receipts—			
Payments received on account of Reparations from Germany under the Dawes Plan		4,025,165 12	
Amount received from the British Treasury in final settlement of outstanding claims and counter claims arising out of the war		662,442 12	
			4,687,607 24

SCHEDULES TO CASH STATEMENT

	$ cts.	Receipts $ cts.	Payments $ cts.
SCHEDULE "AA"			
Advances to Foreign Governments—			
Greek Government Account		200,000 00	
Balance of receipts over payments as per cash statement			200,000 00
SCHEDULE "BB"			
Insurance and Superannuation Funds—			
Government Annuities		5,053,173 42	1,403,557 80
Insurance Fund, Civil Service		760,423 62	120,799 11
Insurance Fund, Returned Soldiers		1,709,697 19	807,033 05
Retirement Fund		724,431 70	236,776 99
Civil Service Superannuation and Retirement Act, 1893 Now Chap. 17, R.S. 1906		113,453 77	46,568 04
Civil Service Superannuation Act, 1924, now Chap. 24, R.S. 1927		4,764,796 06	699,516 22
Balance of receipts over payments as per cash statement			9,811,724 55
		13,125,975 76	13,125,975 76
SCHEDULE "CC"			
Trust Funds—			
Alberta School Lands		1,246,718 95	1,622,828 28
Burrard Dry Dock Pontoons		1,433 03	
Canadian National Railways—			
Equipment Issues 1923, Redemption Account		1,500,000 00	1,500,000 00
Guaranteed Bond Issues, Outstanding Interest		2,393,037 50	2,375,187 50
Common School Fund		671 70	
Contractors Securities		2,017,673 42	1,623,188 08
Decayed Pilots Fund		20,367 69	23,240 74
Empress of Ireland Relief Fund		4,036 94	4,076 48
Halifax Pilots Pension Fund		11,059 32	11,620 90
Immigration Guarantee and Special Funds		279,120 39	267,988 59
Intercolonial and Prince Edward Island Railway Employees' Provident Fund		865,228 70	865,228 70
Indian Funds		1,725,465 25	1,299,428 35
Manitoba School Lands		59,918 71	67,067 78
Military Estates No. 1		14,495 84	23,914 82
Military Estates No. 2		1,283 42	4,333 08
Militia and Defence—Regimental Funds		6,845 81	124,690 31
Royal Military College—Cadet Funds		54,873 40	57,531 09
Saskatchewan School Lands		1,394,538 04	1,168,035 43
Soldiers' Civil Re-establishment—War Service Gratuity		3,551 21	3,437 41
Soldiers' Civil Re-establishment—Pensions, etc		402,682 41	378,969 62
Sydney Pilots Pension Fund		11,227 61	11,304 71
St. John Pilots' Pension Fund		8,734 41	9,025 88
Balance of receipts over payments as per cash statement			581,866 00
		12,022,963 75	12,022,963 75
SCHEDULE "DD"			
Miscellaneous Current Accounts—			
Advances to Royal Mint—Copper Purchase Account		100,444 40	89,048 68
Gold Purchase Account		23,893,604 27	23,431,455 04
Nickel Purchase Account		249,131 01	239,499 60
Silver Purchase Account		965,977 67	412,585 73
Bond Holding Account		20,242,183 64	20,242,183 64
Canadian National Railways		50,648,109 60	50,648,109 60
Canadian National Railways (Central Vermont Railway)		8,567,500 00	8,567,500 00
Candidates Election Deposit Account		1,200 00	1,200 00
Canada Grain Act, Advance Account		1,841,079 46	1,845,349 15
Detroit and Windsor Subway Co		50,000 00	50,000 00
Carried forward		106,559,230 05	105,526,931 44

SCHEDULES TO CASH STATEMENT—*Continued*

	$ cts.	Receipts $ cts.	Payments $ cts.
Brought forward		106,559,230 05	105,526,931 44
SCHEDULE "DD"—*Concluded*			
Miscellaneous Current Accounts—Concluded			
Dominion Assay Office		1,652,954 48	1,663,542 39
Empire Settlement Scheme, Advances under		64,312 15	50,608 26
Empire Settlement Scheme, Replacement Suspense		4,585 91	4,585 91
Foreign Coin		2,413,796 61	2,364,332 90
Halifax Pilots—General Account		102,229 53	102,229 53
Imperial Government Account		116,923 58	134,150 21
Indian Affairs Special		8,992 25	13,599 28
W. J. King Suspense Account		90 00	1,898 57
King's Printer, Printing Account		2,137,216 58	2,607,178 99
King's Printer, Stationery Account		1,297,681 81	1,468,010 33
Registration and Insurance Fees *re* War Loan Bonds		23,641 10	23,641 10
Saskatchewan Government Seed Grain Advances of 1908		2,925 13	
Seed Grain and Relief—Department of the Interior		1,200,609 36	170,393 73
Sterling Exchange Refunds		178 00	178 00
Sydney Pilots, General Account		60,360 35	60,360 35
St. John Pilots, General Account		54,843 00	54,843 00
War and Victory Loan Adjustment Accounts			12,050 00
Dominion Notes, Deficiency adjustment account			584 00
Balance of receipts over payments as per cash statement			1,441,451 90
		115,700,569 89	115,700,569 89
SCHEDULE "EE"			
Soldier and General Land Settlement—			
Soldier Land Settlement Loans		6,644,433 05	1,328,114 58
General Land Settlement Loans		67,679 57	1,630,034 87
Land Settlement Purchased Lands		170,628 87	13,634 94
Soldier Land Settlement Assurance Fund		3,403 59	
Land Settlement Suspense		620,820 92	647,293 09
British Land Settlement Advances		1,040,411 86	1,040,411 86
Balance of receipts over payments as per cash statement			3,887,888 52
		8,547,377 86	8,547,377 86
SCHEDULE "FF"			
Interest due and unpaid—			
Unpaid Interest—Domestic Loans		96,734,007 82	96,634,216 83
Unpaid Interest—New York Loans		11,394,967 50	11,368,962 75
Unpaid Interest—London Loans			1,524 32
Balance of receipts over payments as per cash statement			124,271 42
		108,128,975 32	108,128,975 32
SCHEDULE "GG"			
Public Works Capital—Canals—			
Lachine Canal—			
Refunds of Expenditure of previous years		55,398 00	
Trent Canal—			
Construction and betterments			9,164 54
Welland Ship Canal—			
Construction			13,610,103 16
P. Lyall & Sons			56,658 00
Exchequer Court Awards			4,138 10
Refunds of expenditures of previous years		459,640 23	
Welland Canal—			
Refunds of expenditure of previous years		443 31	
Balance of payments over receipts as per cash statement		13,164,582 26	
		13,680,063 80	13,680,063 80

SCHEDULES TO CASH STATEMENT—*Continued*

	$ cts.	Receipts $ cts.	Payments $ cts.
SCHEDULE "HH"			
Public Works Capital—Miscellaneous—			
Ottawa—New departmental building			185,101 95
Ottawa—Parliament Building			82,634 98
Ottawa—National Research Council Laboratories			92,699 52
Refund of expenditure of previous years		150 00	
Ottawa—Expropriation of property between Sparks and Wellington Streets, East of Elgin Street			278,869 40
Esquimalt, B.C.—Construction of Dry Dock			82,950 08
Refund of expenditure of previous years		119 70	
Government Shipbuilding Programme—			
Proceeds of sale of ships		38,000 00	
St. Lawrence River—Improvements—			
Ship Channel—Dredging	1,894,911 65		
Sorel Shipyard	150,035 68		
Sorel Shipyard—Reconditioning wharf No. 4	11,982 95		
Sorel Shipyard — Compassionate Allowance, M. Champagne	3,050 00		
Sorel Shipyard—Compassionate Allowance, O. Lamothe	525 45		
Sorel Shipyard — Compassionate Allowance, R. A. Cournoyer	3,050 00		2,063,555 73
Refund of expenditure of previous years		2,584 96	
Lower Lakes Terminals—Expenditure			73,102 50
Port Arthur and Fort William—Harbour Improvements			145,829 56
Quebec Harbour—Champlain Dock			58,798 37
St. John Harbour—Improvements			8,859 79
Sorel Harbour—Improvements			299,873 90
Toronto Harbour—Improvements			13,382 65
Refund of expenditure of previous years		2,090 00	
Balance of payments over receipts as per cash statement		3,342,713 77	
		3,385,658 43	3,385,658 43
SCHEDULE "II"			
Public Works Capital—Railways—			
Canadian Government Railways—			
Car Ferry, Prince Edward Island			172,862 35
Exchequer Court Awards			5,728 80
Refunds of expenditure of previous years—			
Sale of S. S. *Drummond* and *McKee*, sixth instalment		36,000 00	
Refunds		175 00	
Hudson Bay Railway—			
Construction			6,271,257 43
Refunds of expenditure of previous years		111,694 48	
Balance of payments over receipts as per cash statement		6,301,979 10	
		6,449,848 58	6,449,848 58
SCHEDULE "JJ"			
Miscellaneous Advances (Non-active)			
Canada Land and Irrigation Company		50,899 78	
Quebec Harbour Commission			2,888,000 00
Southern Alberta Land Company		329,573 96	
Balance of payments over receipts as per cash statement		2,507,526 26	
		2,888,000 00	2,888,000 00

SCHEDULES TO CASH STATEMENT—*Continued*

	$ cts.	Receipts $ cts.	Payments $ cts.
SCHEDULE "KK"			
Advances to Provinces, Banks, etc.—			
Province of Manitoba (Housing Loans)		60,000 00	
Province of New Brunswick (Housing Loans)		52,000 00	
Province of Nova Scotia (Housing Loans)		150,000 00	
Province of Quebec (Housing Loans)		13,200 00	
Loans to Banks, Finance Act Chap. 70. R.S. 1927		442,880,000 00	490,380,000 00
Montreal Harbour Commission			1,370,000 00
Vancouver Harbour Commission			1,596,000 00
Chicoutimi Harbour Commission			500,000 00
Halifax Harbour Commission			30,000 00
St. John Harbour Commission			602,000 00
Canadian Farm Loan Board		44,989 95	50,000 00
Balance of payments over receipts as per cash statement		51,327,810 05	
		494,528,000 00	494,528,000 00
SCHEDULE "LL"			
Savings Banks—			
Post Office Savings Banks		9,424,365 65	4,519,506 99
Dominion Government Savings Banks		649,335 64	8,282,200 82
Balance of payments over receipts as per cash statement		2,728,006 52	
		12,801,707 81	12,801,707 81
SCHEDULE "MM"			
Contingent Funds—			
Banque St. Hyacinthe			65 00
Banque St. Jean			30 00
Bank of Vancouver			21 25
Banque Ville Marie		10 00	10 00
Board of Pension Commissioners, Mennonite Funds			655 00
Cash Suspense		1,530,088 95	1,744,254 68
Home Bank of Canada			4,337 95
Income Tax Suspense		2,800 00	5,200 00
Internment operations			14 50
Land Assurance Fund		381 92	
Outstanding cheques		83,603 57	70,981 54
Railways and Canals Suspense		109 72	
Railway Grade Crossing Fund		224,889 39	856,535 23
Sovereign Bank of Canada			70 31
St. Stephens Bank			9 00
Unclaimed Dividends under the Bankruptcy Act		668 38	46 90
Victory Loan, 1917, at credit of subscribers in arrears		6,700 00	125 00
Victory Loan, 1918, at credit of subscribers in arrears			80 00
Victory Loan, 1919, at credit of subscribers in arrears			95 00
York County Loan and Savings Company (In Liquidation)			9 96
Balance of payments over receipts as per cash statement		833,289 39	
		2,682,541 32	2,682,541 32
SCHEDULE "NN"			
Loan Accounts (Funded Debt)—			
Payable in Canada—			
Dominion Stock, issue B, 3½ per cent			400 00
Dominion of Canada War Loan, 1915–25, 5 per cent		200 00	33,500 00
Debenture stock 5 per cent 1919		1,000 00	
Debenture Stock 5 per cent (School Lands)		1,993,000 00	
War Savings Certificates		50 00	840 00
War Savings and Thrift Stamps			6,834 50
Dominion of Canada Savings Certificates			5,680 00
Victory Loan, 1917, due 1922, 5½ per cent		1,150 00	12,400 00
Carried forward		1,995,400 00	59,654 50

SCHEDULES TO CASH STATEMENT—*Concluded*

	$ cts.	Receipts $ cts.	Payments $ cts.
Brought forward		1,995,400 00	59,654 50
SCHEDULE "NN"—*Concluded*			
Loan Accounts (Funded Debt)—Concluded			
Payable in Canada—Concluded.			
Victory Loan, 1917, due 1927, 5½ per cent		3,600 00	1,078,250 00
Victory Loan, 1918, due 1923, 5½ per cent		1,700 00	27,300 00
Victory Loan, 1919, due 1924, 5½ per cent			20,400 00
Renewal Loan 1922, due 1927, 5½ per cent		100 00	479,150 00
Refunding Loan 1923, due 1928, 5 per cent			46,496,400 00
Provincial Notes, Nova Scotia			3 89
Payable in New York—			
New York Loan, 1919–29, 5½ per cent			5,422,200 00
New York Loan, 1917–19, 5 per cent		1,000 00	
Sinking Funds—			
Loan of 1909–34	681,955 35		
Loan of 1930–50	1,738,942 99		
Loan of 1940–60	1,041,413 99		
			3,462,312 33
Sinking Funds Cash		1,272,263 60	1,321,296 06
Balance of payments over receipts as per cash statement		55,092,903 18	
		58,366,966 78	58,366,966 78
SCHEDULE "OO"			
Temporary Loans—			
New York Loan 1917–19, 5 per cent			1,000 00
Debenture Stock 1920, 5 per cent (Custodian of Enemy Property)			200,000 00
Balance of payments over receipts as per cash statement		201,000 00	
		201,000 00	201,000 00

Year	Expenditure chargeable to Consolidated Fund	Expenditure chargeable to Capital	Railway Subsidies	War and Demobilization	Other charges including Cost of Loan Flotations	Total Disbursements
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
1868.....	13,486,092 96	548,437 58	.....	.....	37,157 98	14,071,688 52
1869.....	14,038,084 00	440,418 40	.....	.....	429,663 24	14,908,165 64
1870.....	14,345,509 58	3,515,116 18	.....	.....	155,988 18	18,016,613 94
1871.....	15,623,081 72	3,670,396 51	.....	.....	.....	19,293,478 23
1872.....	17,589,468 82	7,853,049 79	.....	.....	223,456 13	25,665,974 74
1873.....	19,174,647 92	19,859,441 17	.....	.....	5,718 48	39,039,807 57
1874.....	23,316,316 75	10,177,740 06	.....	.....	4,018 90	33,498,075 71
1875.....	23,713,071 04	6,922,742 33	.....	.....	2,253,097 17	32,888,910 54
1876.....	24,488,372 11	7,154,007 94	.....	.....	315,764 40	31,958,144 45
1877.....	23,519,301 77	7,599,709 55	.....	.....	1,388,984 38	32,507,995 70
1878.....	23,503,158 25	6,657,200 36	.....	.....	385,412 99	30,545,771 60
1879.....	24,455,381 56	5,648,331 66	.....	.....	676,225 30	30,779,938 52
1880.....	24,850,634 45	8,241,173 98	.....	.....	949,947 68	34,041,756 11
1881.....	25,502,554 42	8,176,316 50	.....	.....	117,771 74	33,796,642 66
1882.....	27,067,103 58	7,405,637 06	.....	.....	201,884 75	34,674,625 39
1883.....	28,730,157 45	14,147,359 76	.....	.....	21,368 75	42,898,885 96
1884.....	31,107,706 25	23,977,702 44	208,000 00	.....	2,567,452 84	57,860,861 53
1885.....	35,037,060 12	13,220,185 35	403,245 00	.....	502,587 06	49,163,077 53
1886.....	39,011,612 26	9,589,734 19	2,701,249 00	.....	10,534,973 07	61,837,568 52
1887.....	35,657,680 16	4,439,938 72	1,406,533 00	.....	.....	41,504,151 88
1888.....	36,718,494 79	7,162,964 26	1,027,041 92	.....	155,623 07	45,064,124 04
1889.....	36,917,834 76	4,420,313 66	846,721 83	.....	1,333,327 81	43,518,198 06
1890.....	35,994,031 47	4,053,158 98	1,678,195 72	.....	44,946 56	41,770,332 73
1891.....	36,343,567 96	3,115,860 04	1,265,705 87	.....	68,074 32	40,793,208 19
1892.....	36,765,894 18	2,164,456 78	1,248,215 93	.....	2,093,569 43	42,272,136 32
1893.....	36,814,052 90	3,088,317 60	811,394 07	.....	139,963 34	40,853,727 91
1894.....	37,585,025 52	3,862,969 67	1,229,885 10	.....	330,353 60	43,008,233 89
1895.....	38,132,005 05	3,030,490 40	1,310,549 10	.....	399,293 89	42,872,338 44
1896.....	36,949,142 03	3,781,311 21	3,228,745 49	.....	137,185 19	44,096,383 92
1897.....	38,349,759 84	3,523,160 23	416,955 30	.....	682,880 52	42,972,755 89
1898.....	38,832,525 70	4,143,503 39	1,414,934 78	.....	943,317 19	45,334,281 06
1899.....	41,903,500 54	5,936,342 94	3,201,220 05	.....	501,571 76	51,542,635 29
1900.....	42,975,279 51	7,468,843 24	725,720 35	.....	1,547,623 74	52,717,466 84
1901.....	46,866,367 84	7,695,488 34	2,512,328 86	.....	908,681 42	57,982,866 46
1902.....	50,759,391 97	10,078,638 06	2,093,939 00	.....	1,038,830 83	63,970,799 86
1903.....	51,691,902 76	7,052,724 58	1,463,222 34	.....	1,538,722 13	61,746,571 81
1904.....	55,612,832 70	7,881,718 54	2,046,878 45	.....	6,713,617 94	72,255,047 63
1905.....	63,319,682 86	11,933,491 91	1,275,629 53	.....	2,275,334 47	78,804,138 77
1906.....	67,240,640 95	11,913,871 11	1,637,574 37	.....	2,485,555 29	83,277,641 72
1907 9mo.	51,542,161 09	11,329,143 82	1,324,889 30	.....	1,581,944 36	65,778,138 57
1908.....	76,641,451 59	30,429,906 86	2,037,629 30	.....	3,469,692 12	112,578,679 87
1909.....	84,064,232 38	42,593,166 97	1,785,887 39	.....	4,998,237 55	133,441,524 29
1910.....	79,411,747 12	29,756,353 38	2,048,097 05	.....	4,179,576 15	115,395,773 70
1911.....	87,774,198 32	30,852,963 38	1,284,892 04	.....	2,949,196 72	122,861,250 46
1912.....	98,161,440 77	30,939,575 95	859,400 25	.....	7,181,665 23	137,142,082 20
1913.....	112,059,537 41	27,206,046 13	4,935,507 35	.....	255,786 93	144,456,877 82
1914.....	127,384,472 99	37,180,175 93	19,036,236 77	.....	2,640,161 94	186,241,047 63
1915.....	135,523,206 54	41,447,320 03	5,191,507 48	60,750,476 01	5,186,016 27	248,098,526 33
1916.....	130,350,726 90	38,566,950 50	1,400,171 42	166,197,755 47	3,186,898 20	339,702,502 49
1917.....	148,599,343 23	26,880,031 51	959,583 88	306,488,814 63	15,275,345 03	498,203,118 28
1918.....	178,284,312 83	43,111,903 63	720,404 75	343,836,801 98	10,706,786 72	576,660,209 91
1919.....	232,731,282 98	25,031,266 30	43,805 32	446,519,439 48	−7,283,581 61	697,042,212 47
1920.....	303,843,929 90	69,301,877 83	334,845 55	346,612,954 56	19,995,313 04	740,088,920 88
1921.....	361,118,145 21	40,012,807 22	.....	16,997,543 99	492,048 06	418,620,544 48
1922.....	347,560,690 63	16,295,332 55	.....	1,544,249 66	301,518 01	365,701,790 85
1923.....	332,293,732 09	9,807,124 34	.....	4,464,759 76	4,042,930 53	350,608,546 72
1924.....	324,813,189 75	10,861,277 09	*−1,521 82*	446,082 79	7,902,758 94	344,021,786 75
1925.....	318,891,901 25	16,550,510 77	.....	506,931 27	3,953,432 65	339,902,775 94
1926.....	320,660,479 14	16,798,548 92	.....	191,392 79	6,330,092 09	343,980,512 94
1927.....	319,548,172 59	19,558,702 63	.....	64,485 08	7,814,976 87	346,986,337 17
1928.....	336,167,960 98	20,635,647 85	.....	1,656,011 00	1,705,311 47	360,164,931 30
1929.....	350,952,924 03	22,809,275 13	.....	−669,399 06	2,067,153 06	375,159,953 16
	6,172,368,168 22	939,508,173 19	76,115,221 09	1,695,608,299 41	153,043,205 87	9,036,643,067 78

Year	Consolidated Fund	Other Receipts	Total Receipts	Difference between Receipts and Expenditure	Consolidated Fund	
					Surplus	Deficit
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
1868.....	13,687,928 49	.....	13,687,928 49	383,760 03	201,835 53	.....
1869.....	14,379,174 52	.....	14,379,174 52	528,991 12	341,090 52	.....
1870.....	15,512,225 65	27,431 71	15,539,657 36	2,476,956 58	1,166,716 07	.....
1871.....	19,335,560 81	39,475 98	19,375,036 79	+ 81,558 56	3,712,479 09	.....
1872.....	20,714,813 68	.....	20,714,813 68	4,951,161 06	3,125,344 86	.....
1873.....	20,813,469 45	157,121 90	20,970,591 35	18,069,216 22	1,638,821 53	.....
1874.....	24,205,092 54	302,560 39	24,507,652 93	8,990,422 78	888,775 79	.....
1875.....	24,648,715 04	1,008 58	24,649,723 62	8,239,186 92	935,644 00	.....
1876.....	22,587,587 05	4,468 22	22,592,055 27	9,366,089 18	.....	1,900,785 06
1877.....	22,059,274 11	868,486 44	22,927,760 55	9,580,235 15	.....	1,460,027 66
1878.....	22,375,011 88	31,245 49	22,406,257 37	8,139,514 23	.....	1,128,146 37
1879.....	22,517,382 14	4,503,142 76	27,020,524 90	3,759,413 62	.....	1,937,999 42
1880.....	23,307,406 69	57,140 21	23,364,546 90	10,677,209 21	.....	1,543,227 76
1881.....	29,635,297 54	.....	29,635,297 54	4,161,345 12	4,132,743 12	.....
1882.....	33,383,455 52	1,799,093 69	35,182,549 21	+ 507,923 82	6,316,351 94	.....
1883.....	35,794,649 80	1,009,019 15	36,803,668 95	6,095,217 01	7,064,492 35	.....
1884.....	31,861,961 73	953,264 00	32,815,225 73	25,045,635 80	754,255 48	.....
1885.....	32,797,001 22	557,039 59	33,354,040 81	15,809,036 72	.....	2,240,058 90
1886.....	33,177,040 39	302,842 41	33,479,882 80	28,357,685 72	.....	5,834,571 87
1887.....	35,754,993 25	537 66	35,755,530 91	5,748,620 97	97,313 09	.....
1888.....	35,908,463 53	.....	35,908,463 53	9,155,660 51	.....	810,031 26
1889.....	38,782,870 23	.....	38,782,870 23	4,735,327 83	1,865,035 47	.....
1890.....	39,879,925 41	.....	38,879,925 41	1,890,407 32	3,885,893 94	.....
1891.....	38,579,310 88	.....	39,579,310 88	2,213,897 31	2,235,742 92	.....
1892.....	36,921,871 60	.....	36,921,871 60	5,350,264 72	155,977 42	.....
1893.....	38,168,608 85	40,000 00	38,208,608 85	2,645,119 06	1,354,555 95	.....
1894.....	36,374,693 07	190 14	36,374,883 21	6,633,350 68	.....	1,210,332 45
1895.....	33,978,129 47	.....	33,978,129 47	8,894,208 97	.....	4,153,875 58
1896.....	36,618,590 72	.....	36,618,590 72	7,477,793 20	.....	330,551 31
1897.....	37,829,778 40	.....	37,829,778 40	5,142,977 49	.....	519,981 44
1898.....	40,555,238 03	1,272 03	40,556,510 06	4,777,771 00	1,722,712 33	.....
1899.....	46,741,249 54	1,853 41	46,743,102 95	4,799,532 34	4,837,749 00	.....
1900.....	51,029,994 02	1,472 69	51,031,466 71	1,686,000 13	8,054,714 51	.....
1901.....	52,514,701 13	1,631 63	52,516,332 76	5,466,533 70	5,648,333 29	.....
1902.....	58,050,790 03	1,543 31	58,052,333 34	5,918,466 52	7,291,398 06	.....
1903.....	66,037,068 93	3,311,015 17	69,348,084 10	+ 7,601,512 29	14,345,166 17	.....
1904.....	70,669,816 82	9,434 67	70,679,251 49	1,575,796 14	15,056,984 12	.....
1905.....	71,182,772 67	3,299 83	71,186,072 50	7,618,066 27	7,863,089 81	.....
1906.....	80,139,360 07	2,033 76	80,141,393 83	3,136,247 89	12,898,719 12	.....
1907 9 mo	67,969,328 29	2,781 36	67,972,109 65	+ 2,193,971 08	16,427,167 20	.....
1908.....	96,054,505 81	910 91	96,055,416 72	16,523,263 15	19,413,054 22	.....
1909.....	85,093,404 35	456,175 41	85,549,579 76	47,891,944 53	1,029,171 97	.....
1910.....	101,503,710 93	112,764 65	101,616,475 58	13,779,298 12	22,091,963 81	.....
1911.....	117,780,409 78	103,918 58	117,884,328 36	4,976,922 10	30,006,211 46	.....
1912.....	136,108,217 36	.....	136,108,217 36	1,033,864 84	37,946,776 59	.....
1913.....	168,689,903 45	524 04	168,690,427 49	+ 24,233,549 67	56,630,366 04	.....
1914.....	163,174,394 56	.....	163,174,394 56	23,066,653 07	35,789,921 57	.....
1915.....	133,073,481 73	.....	133,073,481 73	115,025,044 60	.....	2,449,724 81
1916.....	172,147,838 27	1,555 30	172,149,393 57	167,553,108 92	41,797,111 37	.....
1917.....	232,701,294 00	.....	232,701,294 00	265,501,824 28	84,101,950 77	.....
1918.....	260,778,952 55	.....	260,778,952 55	315,881,257 36	82,494,639 72	.....
1919.....	312,946,747 18	.....	312,946,747 18	384,095,465 29	80,215,464 20	.....
1920.....	349,746,334 70	.....	349,746,334 70	390,342,586 18	45,902,404 80	.....
1921.....	434,386,536 60	1,905,647 81	436,292,184 41	+ 17,671,639 93	73,268,391 39	.....
1922.....	381,952,386 99	319,184 45	382,271,571 44	+ 16,569,780 59	34,391,696 36	.....
1923.....	394,614,900 00	8,479,310 30	403,094,210 30	+ 52,485,663 58	62,321,167 91	.....
1924.....	396,837,682 22	9,743,635 74	406,581,317 96	+ 62,559,531 21	72,024,492 47	.....
1925.....	346,834,479 25	4,680,913 18	351,515,392 43	+ 11,612,616 49	27,942,578 00	.....
1926.....	380,745,505 58	2,147,503 48	382,893,009 06	+ 38,912,496 12	60,085,026 44	.....
1927.....	398,695,776 38	1,756,704 02	400,452,480 40	+ 53,466,143 23	79,147,603 79	.....
1928.....	422,717,982 68	6,924,594 51	429,642,577 19	+ 69,477,645 89	86,550,021 70	.....
1929.....	455,463,873 74	4,687,607 24	460,151,480 98	+ 84,991,527 82	104,510,949 71	.....
	7,418,528,921 30	55,311,355 80	7,473,840,277 10	1,562,802,790 68	1,271,680,066 97	25,519,313 89

Year	Total Debt	Total Assets	Net Debt	Increase of Debt	Decrease of Debt
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
1867	93,046,051 73	17,317,410 36	75,728,641 37		
1868	96,896,666 29	21,139,531 46	75,757,134 74	28,493 37	
1869	112,361,998 39	36,502,679 19	75,859,319 20	102,184 46	
1870	115,993,706 76	37,783,964 31	78,209,742 45	2,350,423 25	
1871	115,492,682 76	37,786,165 11	77,706,517 65		503,224 80
1872	122,400,179 36	40,213,107 32	82,187,072 04	4,480,554 39	
1873	129,743,432 19	29,894,970 55	99,848,461 64	17,661,389 60	
1874	141,163,551 33	32,838,586 91	108,324,964 42	8,476,502 78	
1875	151,663,401 62	35,655,023 60	116,008,378 02	7,683,413 60	
1876	161,204,687 86	36,653,173 78	124,551,514 08	8,543,136 06	
1877	174,675,834 97	41,440,525 94	133,235,309 03	8,683,794 95	
1878	174,957,268 96	34,595,199 05	140,362,069 91	7,126,760 88	
1879	179,483,871 21	36,493,683 85	142,990,187 36	2,628,117 45	
1880	194,634,440 68	42,182,852 07	152,451,588 61	9,461,401 25	
1881	199,861,537 51	44,465,757 11	155,395,780 40	2,944,191 79	
1882	205,365,251 97	51,703,601 19	153,661,650 78		1,734,129 62
1883	202,159,104 30	43,692,389 84	158,466,714 46	4,805,063 68	
1884	242,482,416 21	60,320,565 95	182,161,850 26	23,695,135 80	
1885	264,703,607 43	68,295,915 29	196,407,692 14	14,245,841 88	
1886	273,164,341 11	50,005,234 02	223,159,107 09	26,751,414 95	
1887	273,187,626 43	45,872,850 99	227,314,775 44	4,155,668 35	
1888	284,513,841 89	49,982,483 73	234,531,358 16	7,216,582 72	
1889	287,722,062 76	50,192,021 11	237,530,041 65	2,998,683 49	
1890	286,112,295 10	48,579,083 33	237,533,211 77	3,170 12	
1891	289,899,229 62	52,090,199 11	237,809,030 51	275,818 74	
1892	295,333,274 10	54,201,839 66	241,131,434 44	3,322,403 93	
1893	300,054,524 74	58,373,485 13	241,681,039 61	549,605 17	
1894	308,348,023 96	62,164,994 48	246,183,029 48	4,501,989 87	
1895	318,048,754 87	64,973,827 78	253,074,927 09	6,891,897 61	
1896	325,717,536 73	67,220,103 96	258,497,432 77	5,422,505 68	
1897	332,530,131 33	70,991,534 87	261,538,596 46	3,041,163 69	
1898	338,375,984 23	74,419,585 32	263,956,398 91	2,417,802 45	
1899	345,160,902 54	78,887,455 94	266,273,446 60	2,317,047 69	
1900	346,206,979 92	80,713,173 03	265,493,806 89		779,639 71
1901	354,732,432 52	86,252,428 83	268,480,003 69	2,986,196 80	
1902	366,358,476 59	94,529,386 97	271,829,089 62	3,349,085 93	
1903	361,344,098 37	99,737,109 50	261,606,988 87		10,222,100 75
1904	364,962,512 17	104,094,793 57	260,867,718 60		739,270 27
1905	377,678,579 80	111,454,413 20	266,224,166 60	5,356,448 00	
1906	392,269,680 39	125,226,702 64	267,042,977 75	818,811 15	
1907 9 mo.	379,966,826 09	116,294,966 13	263,671,859 96		3,371,117 79
1908	408,207,158 25	130,246,298 41	277,960,859 84	14,288,999 88	
1909	478,535,427 02	154,605,147 85	323,930,279 17	45,969,419 33	
1910	470,663,045 99	134,394,499 66	336,268,546 33	12,338,267 16	
1911	474,941,487 42	134,899,435 39	340,042,052 03	3,773,505 70	
1912	508,338,591 77	168,419,131 06	339,919,460 71		122,591 32
1913	483,232,555 24	168,930,929 56	314,301,625 68		25,617,835 03
1914	544,391,368 86	208,394,518 72	335,996,850 14	21,695,224 46	
1915	700,473,814 37	251,097,731 16	449,376,083 21	113,379,233 07	
1916	936,987,802 42	321,831,631 40	615,156,171 02	165,780,087 81	
1917	1,382,003,267 69	502,816,969 89	879,186,297 80	264,030,126 78	
1918	1,863,335,898 89	671,451,836 39	1,191,884,062 50	312,697,764 70	
1919	2,676,635,724 77	1,102,104,692 33	1,574,531,032 44	382,646,969 94	
1920	3,041,529,586 91	792,660,963 12	2,248,868,623 79	674,337,591 35	
1921	2,902,482,117 04	561,603,133 35	2,340,878,983 69	92,010,359 90	
1922	2,902,347,136 96	480,211,335 23	2,422,135,801 73	81,256,818 04	
1923	2,888,827,236 65	435,050,367 91	2,453,776,868 74	31,641,067 01	
1924	2,819,610,470 28	401,827,195 40	2,417,783,274 88		35,993,593 86
1925	2,818,066,522 94	400,628,837 35	2,417,437,685 59		345,589 29
1926	2,768,779,184 55	379,048,085 13	2,389,731,099 42		27,706,586 17
1927	2,726,298,717 38	378,464,347 29	2,347,834,370 09		41,896,729 33
1928	2,677,137,242 92	380,287,010 00	2,296,850,232 92		50,984,137 17
1929	2,647,033,973 32	421,529,268 22	2,225,504,705 10		71,345,527 82
				2,421,138,136 66	271,362,072 93

COMPARATIVE STATEMENT OF RECEIPTS FROM WAR TAX REVENUES

Year	Banks	Trust and Loan Companies	Insurance Companies	Business Profits	Income Tax	Sales Tax, Tax on Cheques, Transportation Tax, etc.	Total War Tax Revenue
	$ cts.	$ cts.	$ cts	$ cts.	$ cts.	$ cts.	$ cts.
1914-15..	.....	.....	.....	.....	.....	98,056 95	98,056 95
1915-16..	1,300,446 80	324,249 91	459,247 07	.....	.....	1,536,837 94	3,620,781 72
1916-17..	1,114,023 30	202,415 48	419,698 83	12,506,516 72	.....	2,059,583 81	16,302,238 14
1917-18..	1,115,757 65	269,129 08	496,540 55	21,271,083 57	.....	2,227,389 93	25,379,900 78
1918-19..	1,099,764 44	323,340 02	546,113 86	32,970,061 81	9,349,719 80	11,888,508 40	56,177,508 33
1919-20..	1,170,223 45	274,216 28	638,730 76	44,145,184 48	20,263,739 91	15,587,706 70	82,079,801 58
1920-21..	1,257,533 70	293,801 94	807,667 12	40,841,401 25	46,381,824 31	78,803,099 18	168,385,327 50
1921-22..	1,293,697 43	283,994 35	749,958 75	22,815,666 58	78,684,354 80	73,656,488 83	177,484,160 74
1922-23..	1,244,437 14	312,391 39	852,328 12	13,031,461 80	59,711,538 37	106,482,718 08	181,634,874 90
1923-24..	1,236,957 57	308,632 10	857,586 98	4,752,680 89	54,204,027 99	120,676,375 89	182,036,261 42
1924-25..	1,217,753 85	315,314 88	867,901 96	2,704,427 37	56,248,042 82	85,810,717 42	147,164,158 30
1925-26..	1,176,868 95	326,713 80	950,220 85	1,173,448 55	55,571,961 57	98,097,105 81	157,296,319 53
1926-27..	1,174,664 95	335,367 65	947,829 95	710,102 19	47,386,309 22	105,613,160 00	156,167,433 96
1927-28..	1,224,644 46	345,429 85	999,003 34	956,031 44	56,571,047 39	90,222,931 32	150,319,087 80
1928-29..	1,242,398 99	7,640,88	894,863 98	455,232 27	59,422,323 25	83,007,282 78	145,029,742 15

APPENDICES.

93870—4½ m

Appendix No. 1

STATEMENT showing the Funded Debt of Canada payable therein, March 31, 1929, and the annual interest payable thereon

—	Bearing 3½ per cent interest	Bearing 4 per cent interest	Bearing 4½ per cent interest	Bearing 5 per cent interest	Bearing 5½ per cent interest	Bearing 6 per cent interest	Total	Maturing
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	
Loan Funds, L.C.							400 00	Overdue.
Act 28, Vic. Cap. 11, New Brunswick							600 00	Overdue.
Act 31, Vic. Cap. 4						4,000 00	4,000 00	
Act 53, Vic. Cap. 1	69,066 67						69,066 67	Various dates.
War Savings Certificates							19,365 00	Overdue.
War Savings Stamps							97,995 00	Overdue.
Dominion of Canada Savings Certificates							14,145 00	Overdue.
Debenture Stock							2,000 00	Oct. 1, 1919, overdue.
Debenture Stock							200 00	June 1, 1921, overdue.
Debenture Stock (School Lands)				30,957,000 00			30,957,000 00	
War Loan, 1915-25							43,300 00	Dec. 1, 1925, overdue.
War Loan, 1916-31				52,931,600 00			52,931,600 00	Oct. 1, 1931.
War Loan, 1917-37				90,166,900 00			90,166,900 00	Mar. 1, 1937.
Victory Loan, 1917—								
Due 1922							111,250 00	Dec. 1, 1922, overdue.
Due 1927							227,550 00	Dec. 1, 1927, overdue.
Due 1937					236,299,850 00		236,299,850 00	Dec. 1, 1937.
Victory Loan, 1918—								
Due 1923							126,700 00	Nov. 1, 1923, overdue.
Due 1933					446,658,800 00		446,658,800 00	Nov. 1, 1933.
Victory Loan, 1919—								
Due 1924							65,450 00	Nov. 1, 1924, overdue.
Due 1934					511,910,650 00		511,910,650 00	Nov. 1, 1934.
Renewal Loan, 1922—								
Due 1927							74,650 00	Nov. 1, 1927, overdue.
Due 1932					73,325,150 00		73,325,150 00	Nov. 1, 1932.

Refunding Loan, 1923—								
Due 1928							249,600 00	Oct. 15, 1928, overdue.
Due 1943				147,000,000 00			147,000,000 00	Oct. 15, 1943.
Refunding Loan, 1924—								
Due 1944			50,000,000 00				50,000,000 00	Oct. 15, 1944.
Refunding Loan, 1925-40			75,000,000 00				75,000,000 00	Sept. 1, 1940.
Refunding Loan, 1926—								
Due 1930			20,000,000 00				20,000,000 00	Feb. 1, 1930.
Due 1946			45,000,000 00				45,000,000 00	Feb. 1, 1946.
Three Year Treasury Notes, 1927—								
Due 1930		45,000,000 00					45,000,000 00	Dec. 1, 1930.
	69,066 67	45,000,000 00	190,000,000 00	321,055,500 00	1,268,194,450 00	4,000 00	1,824,323,016 67	
Less overdue Bonds and Stock							1,033,205 00	
	69,066 67	45,000,000 00	190,000,000 00	321,055,500 00	1,268,194,450 00	4,000 00	1,823,289,811 67	
Total Interest	2,417 33	1,800,000 00	8,550,000 00	16,052,775 00	69,750,694 75	240 00	96,156,127 08	

Appendix No. 2

STATEMENT showing the portion of the Funded Debt payable in London, March 31, 1929, and the annual interest payable thereon

—	At 2½ per cent interest	At 3 per cent interest	At 3½ per cent interest	At 4 per cent interest	Total Sterling	Total Currency	Maturing
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	$ cts.	
Act 47 Vic., Cap. 3			4,822,028 13 3		4,822,028 13 3	23,467,206 27	On giving 6 months' notice or June 1, 1934.
Act 51 Vic., Cap. 2		1,658,471 18 11			1,658,471 18 11	8,071,230 16	July 1, 1938.
Acts 54-56 Vic., Cap. 3 and 57-58 Vic., Cap. 1		6,000,000 0 0			6,000,000 0 0	29,200,000 00	July 1, 1938.
Act 60-61 Vic., Cap. 3	1,004,421 14 2				1,004,421 14 2	4,888,185 64	October 1, 1947.
Act 51 Vic., Cap. 32			3,093,700 0 0		3,093,700 0 0	15,056,006 66	July 1, 1938.
Act 3 Ed. VII, Cap. 71 and 6-7 Ed. VII, Cap. 7 and 7-8 Ed. VII, Cap. 4, 8-9 Ed. VII, Caps. 35 and 19, 2 Geo. V, Cap. 1			28,162,775 11 0		28,162,775 11 0	137,058,841 00	July 1, 1950 (on or after July 1, 1930, on giving 6 months' notice).
3-4 Geo. V, Cap. 3				19,300,000 0 0	19,300,000 0 0	93,926,666 66	October 1, 1960 (on or after October 1, 1940, on giving 3 months' notice).
Totals bearing interest	1,004,421 14 2	7,658,471 18 11	36,078,504 4 3	19,300,000 0 0	64,041,397 17 4	311,668,136 39	
Total interest	25,110 10 10	229,754 3 2	1,262,747 12 11	772,000 0 0	2,289,612 6 11	11,142,780 12	

Appendix No. 3

STATEMENT showing the portion of the Funded Debt of Canada payable in New York, March 31, 1929, and the annual interest payable thereon

—	Bearing 4½ per cent interest	Bearing 5 per cent interest	Bearing 5½ per cent interest	Total	Maturing
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Loan of 1915–1935		874,000 00		874,000 00	Aug. 1, 1935.
Public Service Loan, 1916				5,000 00	Overdue.
Public Service Loan, 1916		25,000,000 00		25,000,000 00	April 1, 1931.
Loan of 1919–29			54,577,800 00	54,577,800 00	Aug. 1, 1929.
Loan of 1922–52		100,000,000 00		100,000,000 00	May 1, 1952.
Loan of 1926–36	40,000,000 00			40,000,000 00	Feb. 1, 1936.
Two year notes 1917–19				1,000 00	Overdue.
	40,000,000 00	125,874,000 00	54,577,800 00	220,457,800 00	
Total interest	1,800,000 00	6,293,700 00	3,001,779 00	11,095,479 00	

Appendix No. 4

STATEMENT of the Consolidated Fund of Canada on March 31, 1929

—	—	Dr.	Cr.
	$ cts.	$ cts.	$ cts.
To balance as per Public Accounts 1927–28		699,913,096 02	
To amount of expenditures for 1928–29—			
Ordinary Expenditures (details on page 4)		350,952,924 03	
Special Expenditures—			
Adjustment of War Claims (details on page 33)		119,847 74	
Cost of Loan Flotations (details on page 33)		11,330 21	
Miscellaneous Charges—			
Home Bank Depositors Relief Act, 15-16 Geo. V, chap. 45	17,108 95		
Civil Service Superannuation Act, 1924, chap. 24, R.S. 1927 (Government contribution to the Fund)	1,681,700 44		
Government Annuities—Amount required to meet the value of the prospective annuities contracted for up to the end of the Fiscal Year 1928–29	132,844 13		
Railway Grade Corssing Fund—9-10 Geo. V, chap. 30	224,169 33		
		2,055,822 85	
Non-Active accounts written off and charged to Consolidated Fund (Schedule No. 26)		3,810,543 99	
By amount of revenues for 1928–29—			
Ordinary Revenues (details on page 5)			455,463,873 74
Special Receipts—			
Adjustment of War Claims—refunds of previous years' expenditure			789,246 80
German Reparations payments under Dawes Plan			4,025,165 12
Amount received from the British Treasury in final settlement of outstanding claims and counter claims arising out of the War			662,442 12
By balance, Consolidated Fund, March 31, 1929			595,922,837 06
		1,056,863,564 84	1,056,863,564 84

Appendix No. 5

Sinking Funds

To whom paid	Loans	Nature of Investment	Rate of Interest	Amount Purchased	Total
		Canadian Securities	%	$ cts.	$ cts.
Sundry persons.	Loan of 1909–34.	Loan of 1938	3	197,940 51	
		Loan of 1909–34	3½	334,149 21	
		Loan of 1930–50	3½	149,865 63	
					681,955 35
Sundry persons.	Loan of 1930–50.	Loan of 1947	2½	4,380 00	
		Loan of 1938	3	526,726 71	
		Loan of 1909–34	3½	124,414 48	
		Loan of 1930–50	3½	1,083,421 80	
					1,738,942 99
Sundry persons.	Loan of 1940–60.	Loan of 1947	2½	7,786 67	
		Loan of 1938	3	242,914 03	
		Loan of 1909–34	3½	57,262 27	
		Loan of 1930–50	3½	733,451 02	
					1,041,413 99
					3,462,312 33

Appendix No. 6

STATEMENT showing expenditure on account of Civil Government and Miscellaneous Services by Departments for 1928-29

—	Civil Government		Miscellaneous		
	Salaries	Contingencies	Gratuities to Families of Deceased Employees (Statutory)	Unforeseen Expenses	General
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
The Governor General	48,666 66				
The Lieutenant-Governor of—					
Alberta	$ 9,000 00				
British Columbia	9,000 00				
Manitoba	8,758 06				
New Brunswick	9,000 00				
Nova Scotia	9,000 00				
Ontario	10,000 00				
Prince Edward Island	7,000 00				
Quebec	9,919 31				
Saskatchewan	9,000 00				
	80,677 37				
Departments—					
Agriculture	783,878 42	139,250 97	3,210 00		
Archives	70,519 68	17,966 25	160 00		100,649 46
Auditor General's Office	342,686 50	57,855 70			
Civil Service Commission	223,670 87	44,556 36			
External Affairs	118,669 84	39,953 01		6,021 06	477,568 98
Finance	405,392 31	39,516 10	350 00		260,033 17
" Inspector General of Banks	15,000 00	4,538 37			
Office of the Secretary to the Governor General	34,600 85	71,363 99	178 34		
High Commissioner's Office	49,240 00	57,762 39			
Immigration and Colonization	286,382 40	35,042 40	2,453 33		
Indian Affairs	170,500 97	19,909 90	800 00		
Insurance	87,844 80	58,991 32			8,772 51
Interior	1,418,548 36	82,861 33	3,190 00		
Justice	265,917 00	37,107 51	7,746 66		126,266 55
Labour	226,657 44	19,610 71			
Legislation			544 50		13,297 75

Appendix No. 6—Concluded

STATEMENT showing expenditure on account of Civil Government and Miscellaneous Services by Departments for 1928-29—Concluded

—	Civil Government		Miscellaneous		
	Salaries	Contingencies	Gratuities to Families of Deceased Employees (Statutory)	Unforeseen Expenses	General
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Marine and Fisheries	503,147 29	79,757 47	3,074 47		2,473 73
Mines	570,903 62	6,416 85	230 00		15,848 00
National Defence	715,631 14	59,816 30	1,405 66		734,570 72
National Revenue	621,148 92	28,369 75	16,155 59		
Pensions and National Health	206,822 35	59,822 20	4,097 76		80,000 00
Post Office	1,292,414 40	156,118 65	17,958 25		
Privy Council	50,771 00	4,053 64		4,032 32	
Public Printing and Stationery	79,855 97	14,937 54	242 67		
Public Works	657,745 72	74,580 31	9,396 42		
Railways and Canals	270,150 46	38,407 40	5,871 59		30,272 15
Royal Canadian Mounted Police	40,322 67	6,569 83			504 00
Secretary of State	319,308 57	64,394 58	270 00		42,301 39
Trade and Commerce	513,475 27	29,899 15	1,804 40		
Miscellaneous, per schedule No. 22, Page 32					4,926,827 80
	10,470,550 85	1,349,429 98	79,139 64	10,053 38	6,819,386 21
		10,470,550 85			
Total expenditure chargeable to Civil Government		11,819,980 83			
					10,053 38
					79,139 64
Total expenditure chargeable to Miscellaneous Services					6,908,579 23

Appendix No. 7

Interest on Public Debt

To Whom Paid	Description	Time for which Interest was paid	Date to which Interest was paid	Rate of Interest	Amount of Principal	—	Interest Paid	Total
	FUNDED			p.c.	$ cts.	$ cts.	$ cts.	$ cts.
	Debentures and Inscribed Stock							
	Payable in London							
Bank of Montreal	Loan of 1884 Unguaranteed	1 year	Dec. 1, 1928	3½	23,467,206 27		821,352 20	
"	" 1888 "	1 "	Jan. 1, 1929	3	8,071,230 16		242,136 90	
"	" 1892 "	1 "	Jan. 1, 1929	3	18,250,000 00		547,500 00	
"	" 1894 "	1 "	Jan. 1, 1929	3	10,950,000 00		328,500 00	
"	" 1897 "	1 "	April 1, 1929	2½	4,888,185 64		122,204 62	
"	" 1930-50 "	1 "	Jan. 1, 1929	3½	137,058,841 00		4,797,059 42	
"	" 1940-60 "	1 "	April 1, 1929	4	93,926,666 66		3,757,066 66	
"	Canadian Pacific Ry. Land Grant Loan Unguaranteed	1 "	Jan. 1, 1929	3½	15,056,006 66		526,960 22	
								11,142,780 02
	Payable in Canada							
Sundry Persons	Stock A	1 "	April 1, 1929	6	4,000 00		240 00	
"	" B	1 "	Nov. 1, 1928	3½	20,800 00	728 00		
"	" B	Various		3½		13 42	731 42	
"	" C	1 "	Nov. 1, 1928	3½	48,666 67		1,703 34	
Hon. Provincial Treasurers								
Alberta	Debenture Stock (School Lands)	1 "	April 1, 1929	5	* 9,061,000 00	423,687 50		
Manitoba	" "	1 "	April 1, 1929	5	* 5,881,000 00	293,412 50		
Saskatchewan	" "	1 "	April 1, 1929	5	* 16,015,000 00	788,150 00		
							1,505,250 00	
Sundry Persons	Compensation to Seigneurs	1 "	Jan. 1, 1929	6	* 12,140 15		604 64	
"	Compensation to Townships	1 "	Jan. 1, 1929	5	153 00		7 64	
"	War Loan 1916-31	1 "	April 1, 1929	5	52,931,600 00		2,646,580 00	
"	" 1917-37	1 "	Mar. 1, 1929	5	90,166,900 00		4,508,345 00	
"	Victory Loan 1917	1 "	Dec. 1, 1928	5½	* 236,638,650 00		12,996,494 18	
"	" 1918	1 "	Nov. 1, 1928	5½	446,658,800 00		24,566,241 29	
"	" 1919	1 "	Nov. 1, 1928	5½	511,910,650 00		28,155,098 06	
"	Renewal Loan 1922	1 "	Nov. 1, 1928	5½	* 73,399,800 00		4,032,886 98	
	Carried forward						78,414,182 55	11,142,780 02

Appendix No. 7—Concluded

Interest on Public Debt—Concluded

To Whom Paid	Description	Time for which Interest was paid	Date to which Interest was paid	Rate of Interest	Amount of Principal	—	Interest Paid	Total
				p.c.	$ cts.	$ cts.	$ cts.	$ cts.
	Brought forward						78,414,182 55	11,142,780 02
	Funded—*Payable in Canada*—Concluded—							
Sundry Persons	Refunding Loan 1923	1 year	Oct. 15, 1928	5	* 147,249,600 00		9,383,889 64	
"	" 1924	1 "	Oct. 15, 1928	4½	50,000,000 00		2,250,000 00	
"	" 1925-40	1 "	Mar. 1, 1929	4½	75,000,000 00		3,375,000 00	
"	" 1926-46	1 "	Feb. 1, 1929	4½	65,000,000 00		2,925,000 00	
"	Three Year Notes, 1927	1 "	Dec. 1, 1928	4	45,000,000 00		1,800,000 00	
							98,148,072 19	
	Less—War Savings Stamps						17 11	
								98,148,055 08
	Payable in New York							
Sundry Persons	Bond Loan 1915-35	1 "	Feb. 1, 1929	5	874,000 00		43,700 00	
"	Public Service Loan 1916	1 "	April 1, 1929	5	25,000,000 00		1,250,000 00	
"	Bond Loan 1919-29	1 "	Feb. 1, 1929	5½	60,000,000 00	3,300,000 00		
"	" Bonds redeemed before maturity	Various	Various	5½		2,871 78		
							3,302,871 78	
"	Loan of 1922-52	1 year	Nov. 1, 1928	5	100,000,000 00		5,000,000 00	
"	Ten Year Notes, 1926-36	1 "	Feb. 1, 1929	4½	40,000,000 00		1,800,000 00	
								11,396,571 78
	Unfunded							
	Temporary Loans							
Custodian of Enemy Property.	Debenture Stock Payable on demand.	½ year	Oct. 1, 1928	5	200,000 00	5,000 00		
"	"	114 days	Jan. 22, 1929	5	200,000 00	3,068 49		
								8,068 49
	Savings Banks							
Sundry Persons	Post Office Savings Banks	1 year	April 1, 1929	3	* 28,375,769 74		842,025 15	
"	Dominion Government Savings Banks	1 "	April 1, 1929	3			41,280 77	
								883,305 92

	Trust Funds								
Indian Funds	Trust Funds	1 "	April 1, 1929	6		1,089,844 37	65,390 65		
"	"	1 "	April 1, 1929	5		12,113,522 47	605,676 13		
								671,066 78	
Hon. Prov. Treas., Ontario	Trust Fund, Proportion of Common School Fund	1 "	Jan. 1, 1929	5			73,701 19		
Hon. Prov. Treas., Quebec	Trust Fund, Proportion of Common School Fund	1 "	Jan. 1, 1929	5			59,319 44		
								133,020 63	
Hon. Prov. Treas., Alberta	Alberta School Lands	1 "	April 1, 1929	5	*	63,536 28	16,215 07		
Hon. Prov. Treas., Manitoba.	Manitoba School Lands	1 "	April 1, 1929	5	*	7,709 88	471 17		
Hon. Prov. Treas., Saskatchewan.	Saskatchewan School Lands	1 "	April 1, 1929	5	*	631,177 08	10,569 70		
								27,255 94	
Land Assurance Fund	Trust Fund	1 "	April 1, 1929	3	*	11,746 12		340 93	
Sundry Persons	Contractors' Securities	1 "	April 1, 1929	3	*	1,455,578 85		39,354 27	
"	Decayed Pilots' Fund	1 "	April 1, 1929	3	*	15,973 57		311 44	
"	Halifax Pilots' Pension Fund	1 "	April 1, 1929	3	*	6,975 22		65 22	
"	Sydney Pilots' Pension Fund	1 "	April 1, 1929	3	*	8,621 08		135 50	
"	Burrard Dry Dock Pontoons	1 "	April 1, 1929	3	*	8,851 99		242 10	
Militia Council	Strathcona Trust Fund	1 "	Nov. 12, 1928	4		300,000 00	12,000 00		
"	" "	1 "	Nov. 14, 1928	4		200,000 00	8,000 00		
								20,000 00	
Regimental Funds	Trust Fund	8 mos.	Nov. 30, 1928	3	*	5,050 00	2,459 54		
"	"	4 mos.	April 1, 1929	3		5,000 00	50 00		
								2,509 54	
									894,302 35
	Bank Circulation Redemption Fund								
Sundry Banks	Bank Circulation Redemption Fund	1 year	July 1, 1928	3	*	6,098,583 30			177,555 73
	Insurance and Superannuation Funds								
Sundry Persons	Civil Insurance Insurance	1 year	April 1, 1929	6	*	5,058,479 42		274,468 63	
"	Government Annuities	1 "	April 1, 1929	4	*	18,369,099 88		638,889 47	
"	Retirement Fund	1 "	Jan. 1, 1929	5	*	5,245,160 16		241,514 51	
"	Returned Soldiers' Insurance Fund	1 "	April 1, 1929	4	*	6,866,911 13		247,228 00	
"	Civil Service Superannuation Act, 1893, now Chap. 17, R.S. 1906—Fund No. 2	1 "	April 1, 1929	6	*	1,964,202 52		112,507 73	
"	Civil Service Superannuation Act, 1924, now Chap. 24, R.S. 1927—Fund No. 5	1 "	April 1, 1929	4	*	23,946,981 80		824,702 48	
									2,339,310 82
									124,989,950 19

*Balance March 31, 1929.

Appendix No. 8

Changes of Management

To Whom Paid	Service	$ cts.	$ cts.
	Savings Banks and Offices of the Assistant Receivers General		
	Assistant Receiver General's Office, Calgary, Alta.		
G. S. Nicol	Salary April 1, 1928 to March 31, 1929	3,180 00	
Jas. Parry	" 1, 1928 " 31, 1929	2,280 00	
R. N. Genge	" 1, 1928 " 31, 1929	1,695 00	
R. T. Waymark	" 1, 1928 " 31, 1929	1,440 00	
A. Sutherland	" 1, 1928 " 31, 1929	930 00	
E. M. Waymark	Salary Aug. 27, 1928 to Sept. 17, 1928	54 60	
		9,579 60	
	Contingencies, including Printing and Stationery	363 82	
			9,943 42
	Assistant Receiver General's Office, Charlottetown, P.E.I.		
P. Pope	Salary April 1, 1928 to March 31, 1929	2,900 00	
D. A. McKinnon	" 1, 1928 " 31, 1929	1,920 00	
H. S. Stewart	" 1, 1928 " 31, 1929	1,620 00	
H. T. Currie	" 1, 1928 " 31, 1929	1,380 00	
		7,820 00	
	Contingencies, including Printing and Stationery	321 07	
			8,141 07
	Assistant Receiver General's Office, Halifax, N.S.		
A. C. Johnston	Salary April 1, 1928 to March 31, 1929	3,090 00	
R. W. Congdon	" 1, 1928 " 31, 1929	2,310 00	
F. J. Wilks	" 1, 1928 " 31, 1929	1,860 00	
G. D. Hamlin	" 1, 1928 " 31, 1929	1,620 00	
J. H. Webber	" 1, 1928 " 31, 1929	1,275 00	
A. M. Burgoyne	" 1, 1928 " 31, 1929	1,380 00	
B. Dares	Salary July 10, 1928 to July 30, 1928	50 81	
		11,585 81	
	Contingencies, including Printing and Stationery	478 17	
			12,063 98
	Assistant Receiver General's Office, Montreal, P.Q.		
Montreal City and District Savings Bank, Montreal, Que.	Amount paid to this institution for acting as Assistant Receiver General for year ended March 31, 1929	20,000 00	
	Contingencies, including Printing and Stationery	1,079 13	
			21,079 13
	Assistant Receiver General's Office, Regina, Sask.		
W. Winsby	Salary April 1, 1928 to March 31, 1929	3,120 00	
E. P. Blyth	" 1, 1928 " 31, 1929	2,310 00	
G. M. Bury	" 1, 1928 " 31, 1929	1,815 00	
N. J. Lobban	" 1, 1928 to July 31, 1928	286 69	
M. E. Purdon	Salary May 31, 1928 to June 29, 1928	74 92	
G. Colhoun	Salary July 3, 1928 to March 31, 1929	536 12	
		8,142 73	
	Contingencies, including Printing and Stationery	355 30	
			8,498 03
	Carried forward		59,725 63

Appendix No. 8—Continued

CHARGES OF MANAGEMENT—*Continued*

To Whom Paid	Service	$ cts.	$ cts.
	Brought forward		59,725 06
	Assistant Receiver General's Office, St. John, N.B.		
J. E. Wilson	Salary April 1, 1928 to March 31, 1929	3,180 00	
E. H. Cameron	" 1, 1928 " 31, 1929	2,400 00	
G. T. Corbett	" 1, 1928 " 31, 1929	1,695 00	
H. W. Thompson	" 1, 1928 " 31, 1929	1,170 00	
H. P. Humphrey	" 1, 1928 " 31, 1929	1,095 00	
F. J. Ord	" 1, 1928 " 31, 1929	1,110 00	
		10,650 00	
	Contingencies, including Printing and Stationery	328 42	
			10,978 42
	Assistant Receiver General's Office, Toronto, Ont.		
K. Frederickson	Salary April 1, 1928 to March 31, 1929	4,140 00	
S. A. Staden	" 1, 1928 " 31, 1929	3,120 00	
G. A. Ivey	" 1, 1928 " 31, 1929	1,800 00	
J. J. Hannon	" 1, 1928 " 31, 1929	1,905 00	
F. E. Ruhl	" 1, 1928 " 31, 1929	1,410 00	
A. B. Hounsom	" 1, 1928 " 31, 1929	1,380 00	
M. A. M. Livingstone	" 1, 1928 " 31, 1929	1,455 00	
Alf. Maude	" 1, 1928 " 31, 1929	1,455 00	
J. H. O'Neill	" 1, 1928 " 31, 1929	1,455 00	
F. Goodman	" 1, 1928 " 31, 1929	1,107 00	
H. R. Roberts	" 1, 1928 " 31, 1929	1,110 00	
P. MacLeod	" 1, 1928 " 31, 1929	1,080 00	
R. J. Lillie	" 1, 1928 " 31, 1929	902 90	
B. A. Thompson	" 1, 1928 " 31, 1929	1,215 00	
W. M. Donald	" 1, 1928 to Feb. 28, 1929	982 75	
G. M. Dibble	" 1, 1928 to Sept. 12, 1928	346 53	
A. V. Spencer	" 1, 1928 to April 13, 1928	26 00	
S. Lachoski	Salary May 7, 1928 to March 31, 1929	648 39	
O. M. Lorimer	Salary June 28, 1928 " 31, 1929	545 00	
H. R. McClenaghan	Salary Sept. 10, 1928 to Oct. 13, 1928	67 16	
H. Howard	Salary Oct. 25, 1928 to Dec. 25, 1928	121 93	
B. M. Rose	Salary Jan. 7, 1929 to March 31, 1929	168 38	
W. H. Pyatt	Salary Mar. 11, 1929 " 31, 1929	60 97	
Jas. March	Salary April 1, 1928 " 31, 1929	1,260 00	
		27,762 01	
	Contingencies, including Printing and Stationery	1,242 04	
			29,004 05
	Assistant Receiver General's Office, Victoria, B.C.		
D. B. McConnan	Salary April 1, 1928 to March 31, 1929	3,180 00	
Geo. Watts	" 1, 1928 " 31, 1929	2,070 00	
G. H. Llewellyn	" 1, 1928 " 31, 1929	1,695 00	
A. W. Webb	" 1, 1928 " 31, 1929	1,350 00	
W. J. Mullin	" 1, 1928 " 31, 1929	1,110 00	
N. D. Bates	" 1, 1928 to Nov. 10, 1928	696 67	
E. Dumbleton	Salary May 31, 1928 to June 23, 1928	59 92	
V. M. Lawson	Salary Sept. 1, 1928 to March 31, 1929	630 00	
		10,791 59	
	Contingencies, including Printing and Stationery	504 27	
			11,295 86
	Assistant Receiver General's Office, Winnipeg, Man.		
Wm. Morton	Salary April 1, 1928 to March 31, 1929	3,270 00	
S. J. Perkins	" 1, 1928 " 31, 1929	2,160 00	
T. Knight	" 1, 1928 " 31, 1929	1,920 00	
F. D. Ross	" 1, 1928 " 31, 1929	1,515 00	
S. A. Gray	" 1, 1928 to Sept. 15, 1928	495 00	
H. J. Fraser	" 1, 1928 to Aug. 31, 1928	450 00	
	Carried forward	9,810 00	111,003 96

Appendix No. 8—Continued

CHARGES OF MANAGEMENT—*Continued*

To Whom Paid	Service	$ cts.	$ cts.
	Brought forward	9,810 00	111,003 96
	Assistant Receiver General's Office, Winnipeg, Man. —Concluded		
M. E. Bowyer	Salary, April 1, 1928 to Mar. 31, 1929	1,140 00	
W. D. T. Shortreed	Salary Oct. 17, 1928 to March 31, 1929	493 55	
A. A. Gugin	Salary Oct. 24, 1928 " 31, 1929	473 23	
		11,916 78	
	Contingencies, including Printing and Stationery	570 72	
			12,487 50
	Savings Banks		
	Contingencies, including Printing and Stationery		18 83
			123,510 29
	Recapitulation		
	Salaries, Offices of the Assistant Receivers General.	98,248 52	
	Payments to the Montreal City and District Savings Bank, Montreal, Quebec, for acting as Assistant Receiver General at Montreal, and for bond transfer work	20,000 00	
	Contingencies, including Printing and Stationery	5,261 77	
			123,510 29
	English Bill Stamps, Postage, etc.		
Bank of Montreal, London, England	Bill Stamps	1,504 87	
" " "	Postage	881 77	
" " "	Composition of stamp duty	214 14	
		2,600 78	
" " "	LESS—Sundry fees for issuing stock certificates to bearer	1,219 83	
			1,380 95
	Commission for Payment of Interest on Public Debt, etc.		
Bank of Montreal, London, England	Commission and brokerage on sinking funds	8,657 22	
" " "	For services as fiscal agents in London, England, for the year ended Dec. 31, 1928 at rate of £150 per million of debt	46,750 21	
Sundry Banks, New York	Commission for cashing Dominion of Canada coupons and registered interest	15,674 63	
Bank of Montreal, New York.	Fees for registration of bonds domiciled in New York	5,750 00	
Sundry Banks	⅛ of one per cent commission for cashing Dominion of Canada coupons	13,459 33	
			90,291 39
	Printing Dominion Notes, etc.		
Canadian Bank Note Co., Ltd., Ottawa, Ont	Printing Dominion Notes, including Sales Tax	488,121 87	
" "	Ink, etc	263 39	
Capital Wire Cloth & Mfg. Co., Ltd., Ottawa, Ont.	Repairing and recovering cylinder mould	128 00	
Ayers, Ltd., Lachute Mills, Quebec	Groundwood felt	116 80	
Imperial Oil Co., Ltd., Toronto, Ont	Oil, gasoline, etc	15 30	
F. Lake Mfg. Co., Ottawa, Ont	Oil	44 65	
	Carried forward	488,690 01	215,182 63

Appendix No. 8—Continued

CHARGES OF MANAGEMENT—*Continued*

To Whom Paid	Service	$ cts.	$ cts.
	Brought forward	488,690 01	215,182 63
	Printing Dominion Notes, etc.—Concluded		
Laurentian Stone Co., Ltd., Ottawa, Ont.	Lime	37 87	
Mahoney & Rich, Ottawa, Ont.	Cartage	0 30	
Miller & Richard, Toronto, Ont.	Parts for printing press	29 52	
Ottawa Drug Co., Ltd., Ottawa, Ont.	Soda Ash	133 61	
Pritchard-Andrews Co., Ltd., Ottawa, Ont.	Steel dies	8 24	
J. S. Robertson, Montreal, Que.	Cylinder press rollers	49 34	
A. Workman & Co., Ltd.	Supplies for macerating plant	13 80	
F. Rowe	Salary, April 1, 1928 to Mar. 31, 1929	1,680 00	
P. S. Harper	" 1, 1928 to Mar. 31, 1929	1,200 00	
E. J. Theobalds	" 1, 1928 to Mar. 31, 1929	1,500 00	
B. Becker	" 1, 1928 to Mar. 31, 1929	720 00	
N. C. Burton	" 1, 1928 to May 31, 1928	110 10	
D. Campbell	" 1, 1928 to Mar. 31, 1929	720 00	
F. Jones	" 1, 1928 to Mar. 31, 1929	720 00	
Y. Lamoureux	" 1, 1928 to June 30, 1928	180 00	
M. B. Little	" 1, 1928 to Mar. 31, 1929 (less 12 days)	696 78	
A. B. Litle	" 1, 1928 to Mar. 31, 1929	720 00	
M. Paget	" 1, 1928 to Mar. 31, 1929	720 00	
D. M. Racine	" 1, 1928 to Mar. 31, 1929	720 00	
B. Flesher	Salary, Oct. 29, 1928 to Mar. 31, 1929	305 81	
M. Boily	" 22, 1928 to Mar. 31, 1929	319 35	
D. A. Brown	" 22, 1928 to Mar. 31, 1929	319 35	
			499,594 08
	Printing, Advertising, Express, etc.		
Bank of Montreal, New York	Assay office charges	1,142 87	
" "	Loss on assay	633 41	
" "	Customs inspection and entry fees	8 80	
" "	Express on bonds	5 19	
Bank of Montreal, London, England	1/8 of one per cent commission for handling Roumanian and Greek coupons	825 14	
" "	Advertising	317 12	
" "	Printing and Stationery	558 32	
" "	Express	3 20	
" "	Cables	8 03	
Bank of Montreal, Ottawa.	Postage and registration on bonds	11 60	
Department of Public Printing and Stationery, Ottawa, Ont.	Printing and Stationery	8,086 77	
Sundry Express Companies	Express $ 124,990 58		
	Less refunds 13,247 47	111,743 11	
Courtney, Sears & Brennan.	Insurance 588 30		
Greene & Robertson	" 4,272 98		
	4,861 28		
	Less refunds 856 07	4,005 21	
Abbott Coin Counter Co., 143rd St. and Wales Ave., New York, N.Y.	Rubber wheels	0 59	
Capital Motors Ltd., Ottawa	New chassis $2,112, less allowance on old chassis $500	1,612 00	
Collector of Customs	Duty and Sales tax	64 28	
Grant, Holden, Graham, Ltd., Ottawa, Ont.	Coin bags	1,752 10	
A. E. Hicks	Cleaning time locks	22 00	
	Carried forward	130,799 74	714,776 71

Appendix No. 8—Concluded

CHARGES OF MANAGEMENT—*Concluded*

To Whom Paid	Service	$ cts.	$ cts.
	Brought forward	130,799 74	714,776 71
	Printing, Advertising, Express, etc.—Concluded		
Mahoney & Rich, Ottawa	Freight and cartage	2 86	
J. A. Mayer, Montreal, Que.	Coin bag seals	72 50	
O. B. McClintock Co., Minneapolis, Minn.	Dry batteries	4 32	
Porter Safety Seal Co., Chicago, Ill.	Seals	125 00	
The Postage Meter Company, Ottawa, Ont.	Repairs to electric envelope sealing machine	20 00	
Pritchard-Andrews Co., Ltd., Ottawa	Model dater and rubber stamps	3 20	
Receiver General (Post Office Dept.)	Repairs to bags	13 35	
Registrar, C.N.Rys	Transfer charges on bonds	3 00	
P. S. Ross & Sons, Montreal	Services and expenses *re* inspection of bond syndicates, Calgary and Vancouver	2,672 46	
Royal Auto Sales, Ottawa	Stutz car $6,250 less allowance $2,100 on used car	4,150 00	
Steel Equipment Co., Ltd., Ottawa, Ont.	Brackets for truck handles and rubber tires	25 69	
Thornton & Truman, Ottawa, Ont.	Repairs, etc.	236 15	
L. E. Waterman Co., Ltd., Montreal, Que.	Repairs to fountain pens	8 13	
Sundry	Telegrams	7 20	
Sundry	Office Contingencies, Currency Branch	58 74	
Sundry persons	Maintenance, repairs, etc., to departmental car and truck	2,404 00	
C. W. Condie	Travelling expenses	150 75	
R. W. Congdon	"	208 73	
H. T. Currie	"	137 25	
T. Knight	"	654 78	
J. W. McFarlane	"	176 30	
S. P. McCavour	"	141 24	
J. P. Melvin	"	810 95	
G. A. Morrison	"	88 75	
F. M. Peters	"	800 70	
S. A. Staden	"	90 75	
C. E. Clarke (chauffeur)	Salary April 1, 1928 to Mar. 31, 1929	1,620 00	
W. A. Bradley (chauffeur)	Salary April 1, 1928 to Mar. 31, 1929	1,770 00	
			147,256 54
	Statutory, Currency Act, 1910		
A. Stansfield	Trial of Pyx	175 95	
G. J. Mackay	"	171 45	
J. W. Bain	"	177 85	
Clerical assistance	"	17 50	
			542 75
	Salary and contingencies of Walter Duncan, Special Investigating Officer under the direction of the Minister of Finance		
Walter Duncan	Salary April 1, 1928 to Mar. 31, 1929	3,670 00	
	Contingencies	1,102 29	
			4,772 29
	Clerical assistance in connection with the transfer and registration of Bonds		
Sundry persons	Clerical assistance		56,014 36
			923,362 65

Appendix No. 9

Premium, Discount and Exchange Expenditure

—	Rate	Amount Purchased	Amount of Premium	Total
	%	$ cts.	$ cts.	$ cts.
Premium on Bonds purchased	100·15	100,000 00	150 00	
	100·20	5,219,000 00	10,438 00	
	100·425	350,000 00	1,487 50	
	100·45	2,555,000 00	11,497 50	
	100·475	650,000 00	3,087 50	
	100·50	2,506,200 00	12,531 00	
	100·525	500,000 00	2,625 00	
				41,816 50
		£ s. d.		
Premium on Sterling Exchange purchased	4·87 7/16	300,000 0 0	2,312 50	
	4·8760	250,000 0 0	2,333 33	
	4·87 1/16	684,254 6 5	6,985 08	
	4·87 1/4	1,000,000 0 0	10,833 33	
	4·87 1/16	250,000 0 0	2,864 58	
				25,328 82
Discount and Exchange on sundry items				108 78
				67,254 10

Appendix No. 10

AMOUNTS paid as superannuation during the year ended March 31, 1929, to employees retired prior to March 31, 1928

Retired in	Name	Amount paid
	SUPERANNUATION No. 1	$ cts.
	Civil Service Superannuation and Retirement Act, 1870, Chap. 17, R.S. 1906	
1912	Abbott, S. A.	1,746 60
1922	Aikens, J.	1,941 24
1922	Ainsborough, Thos.	909 96
1921	Allan, F. J.	2,375 33
1918	Allen, Geo. G.	808 92
1904	Allen, H. S.	694 32
1918	Allwell, R. J.	525 84
1920	Almon, A. W.	1,026 63
1910	Ami, Henry	1,182 72
1921	Amor, Wm.	1,042 60
1922	Anderson, F. C.	1,559 04
1895	Archambault, Marie P.	198 30
1924	Archambault, R.	909 96
1904	Archer, Wm.	176 00
1905	Ardagh, Henry	388 56
1923	Armstrong, Thos.	930 00
1923	Ashby, A. H.	960 00
1922	Ashe, Ed.	909 96
1922	Ashmead, H. A.	855 48
1915	Asselin, J. E.	840 00
1922	Ayotte, J. E.	890 64
1911	Backhouse, Wm.	454 92
1897	Bailey, Geo. O.	360 00
1911	Baldwin, H. A.	648 00
1922	Ball, Thos.	818 40
1920	Ballantine, Elizabeth	946 08
1923	Barker, K. A.	1,367 28
1924	Barcelo, Edouard	2,940 00
1917	Barrett, John K.	2,239 92
1920	Bathurst, Jas. W.	979 92
1904	Bayly, L. D.	285 70
1920	Beahen, Denis	902 22
1908	Beale, Thomas	408 47
1923	Beard, F.	2,215 66
1923	Beatty, A.	1,260 00
1906	Beaudry, P. A. L. A.	432 00
1922	Beddoe, C. H.	3,020 69
1924	Beers, J. M.	1,035 96
1903	Belford, Ethel	314 64
1922	Bell, John	699 96
1913	Bellerive, George	262 50
1904	Benjamin, E. H.	985 80
1897	Bennett, J. H.	540 00
1922	Bennett, W. E.	2,102 63
1915	Bérubé, Pierre A.	501 48
1919	Binks, Geo. J.	2,344 92
1923	Bishop, R. S.	1,958 04
1914	Blackadar, A. K.	2,484 96
1920	Blair, H. C.	2,085 36
1920	Bliss, T. A. D.	1,959 96
1905	Blomfield, Geo. H.	152 04
1922	Blondeau, D. S.	1,642 08
1922	Boddy, J. S.	1,410 12
1925	Bolger, M. K.	1,336 92
1923	Bollard, J. H.	1,936 56
1921	Booth, Geo.	1,119 96
1918	Borden, J. W.	2,077 83
1917	Bourgeois, Joseph	207 00
1921	Bouteiller, G. A.	1,893 84
1920	Boville, T. C.	3,733 32
1908	Bowser, Francis	448 00
1897	Boys, T. R.	205 01
1905	Bradley, James	260 88
1922	Bray, S.	2,190 96
1916	Brennan, P. J.	1,179 72
1921	Brett, Wm.	1,054 80
1915	Briegal, Frederick	1,749 96
*1915	Brophy, W. M.	228 80
1916	Brough, James S.	1,662 48
1917	Broughton, Jas. L.	1,435 56
1919	Brown, J. H.	1,697 40
1904	Buckley, Jas.	339 96
1921	Bull, G. H.	1,185 24
1913	Burrows, Wm.	481 92
1910	Bussell, John	309 00
1921	Butler, J.	1,042 20
1918	Butler, R. J.	1,238 08
1922	Cairns, A. W.	2,746 20
1901	Caldwell, Thos.	522 00
1916	Cameron, Alex. McK.	1,155 72
1921	Campbell, Jos. H.	876 35
1921	Caron, A. E.	1,950 66
1917	Carrier, Jos. E.	979 92
1911	Carty, Wm.	249 55
*1911	Casault, Napoléon	139 98
1911	Chamberlain, A. J.	504 00
1922	Chamberlain, H.	679 92
1907	Chase, Isaac	840 00
1923	Cheyne, A. J.	1,092 00
1925	Chillas, J. P.	2,272 32
1910	Chubbuck, C. E. D.	1,373 64
1918	Churchill, James	840 00
1926	Clarke, Chas. F.	1,113 00
1921	Clarke, Geo.	583 32
1925	Clark, O. S.	1,020 72
*1907	Clute, John S.	1,263 84
1924	Cochrane, J. B.	998 80
1905	Cochrane, W. C.	330 99
1920	Code, W. A.	1,411 56
1913	Coleman, Charles	726 00
1918	Coleman, Lilian	624 00
*1918	Comer, Geo. W. H.	465 00
1926	Conway, W. A.	1,875 96
1924	Cook, M. E.	1,369 56
1921	Cooper, W. J.	1,450 80
1916	Corbeil, Ed.	450 72
1923	Courtman, John	1,008 00
1906	Cowan, E.	387 00
1923	Cox, R. H.	1,176 00
1924	Cox, R. S.	1,266 96
1925	Crabbe, O. R.	1,063 92
1926	Crate, A. E.	1,467 60
1920	Creighton, H. S.	1,119 96
1909	Crisp, A. C.	840 00
1918	Crowe, Wm. J.	747 96
1920	Cunningham, F. H.	2,800 00
1910	Curran, Alfred	1,042 66
1918	Cushing, James J.	619 74
1924	Cushing, Jno.	882 00
1922	Cuthbert, W. J.	631 08
1906	Dale, L. E.	329 28
1922	D'Aoust, Omer	951 96
1919	Davidson, J. J.	1,188 00
1923	Davison, L. D.	665 64
1924	Deacon, J. L.	1,386 00
1914	DeLaney, E. J.	939 12
1911	De Lisle, Joseph	1,013 28
1914	De Long, Isaiah P. E.	430 68
1923	Desaulniers, D. L.	2,656 44

Appendix No. 10—Continued

AMOUNTS paid as superannuation during the year ended March 31, 1929, to employees retired prior to March 31, 1928—*Continued*

Retired in	Name	Amount paid	Retired in	Name	Amount paid
	SUPERANNUATION No. 1	$ cts.		SUPERANNUATION No. 1	$ cts.
1924	Desjardins, A. W.	1,119 96	1914	Hall, William S.	768 48
1918	Devinney, F. J.	951 96	1912	Hambly, P. H.	410 40
1913	Dingman, N. J.	1,890 00	1919	Hanley, Arch'd.	1,050 00
1900	Dodds, E. W. K.	324 00	1922	Hanrahan, P.	1,174 44
1920	Dodds, Jno.	1,270 80	1909	Harper, James F.	300 00
1909	Doller, W. J.	526 20	1923	Harris, G. M.	1,848 00
1917	Doray, J. L. E.	979 92	1904	Harris, J. H.	168 00
1913	Doucet, Eugène	1,032 50	1909	Hawkesworth, G. A.	677 52
1924	Doyle, Mary C.	1,379 40	1922	Hayes, Jeremiah	817 44
1920	Driver, Thos.	1,337 78	1924	Hayes, John J.	1,200 72
1918	Drummond, Robt. F.	1,057 44	1905	Hayes, W. H.	610 00
1922	Duboulay, A.	841 44	1914	Hayward, W. G.	446 64
*1912	Duggan, E. J.	1,447 82	*1914	Heath, E. L.	126 70
1923	Duplessis, L. J. T. R.	2,013 60	1921	Heintz, R. M.	2,070 72
*1922	Durston, R.	380 31	1918	Helliwell, H. N.	1,050 00
1927	Eagleson, John	1,218 00	1914	Henry, K. J.	1,959 96
1917	Eagleson, Wm. H.	1,470 00	1921	Hesson, C. A.	1,301 16
1919	Eaton, Wm. P.	979 92	1905	Higgins, Richard	228 84
*1902	Eckersley, John	793 30	1920	Hill, W. B. A.	927 96
1922	Eckhardt, W. H. A.	1,764 00	1898	Hopkirk, J. E.	700 00
1925	Edwards, E. T.	1,150 32	1923	House, W. H.	1,287 96
1922	Elbourne, Geo.	1,035 14	*1922	Howard, J. P.	86 26
1914	Ellis, Rachel G.	528 00	1887	Howe, Sydenham	1,216 00
1905	Farley, J. F.	727 92	1897	Hudon, A.	399 96
*1914	Fenerty, A.	523 18	1923	Huggan, Wm. T.	1,973 28
1921	Ferguson, Alex.	688 32	1904	Hunt, William Josiah	321 96
1912	Finnegan, Edward	549 96	1921	Hutty, R. H. G.	1,042 20
*1922	Fisher, C. E.	601 98	*1921	Iler, B.	1,796 63
1922	Fleming, J. B.	1,959 96	1920	Isaacson, H. N.	1,559 76
1923	Florence, C.	1,050 00	1922	Jackson, E. S.	794 64
1909	Flynn, D. J.	680 52	1901	Jackson, J. A.	340 00
1926	Flynn, John	588 00	1922	James, T. C.	1,609 92
1916	Flynn, Wm.	1,096 56	1925	Johnson, B. E.	559 92
1922	Forest, S.	921 60	1927	Johnson, J. E.	2,113 92
1920	Fortier, L. M.	1,903 92	1923	Johnstone, G.	1,609 92
1924	Foster, A. B.	2,152 50	1922	Johnstone, W. J.	2,799 96
1924	Foster, Jas.	831 60	1897	Jones, Allan	1,119 96
1916	Frank, E.	638 52	1914	Jones, C. J.	2,450 00
1922	Frazer, A. J.	1,890 00	1913	Jones, James G.	473 52
1922	Frazer, Peter	1,152 00	1920	Jones, L. K.	2,800 00
1916	French, J. L.	867 96	1921	Jones, R.	1,568 76
1922	Frigon, J. A.	2,625 00	1918	Jones, W. E. C.	951 96
1903	Gabriel, J. McN.	576 00	1919	Just, C. F.	2,799 96
1899	Galbraith, J.	197 52	1922	Kavanagh, C. E.	1,991 16
*1918	Gallet, Alphonse	657 69	1923	Keating, C. J.	2,016 00
*1925	Garneau, A. L.	1,064 00	1922	Kemp, A. E.	1,855 00
*1922	Gass, W. H.	489 96	1922	Ketchum, F. E.	1,092 00
1925	Gaudry, H. D.	1,138 56	1922	Ketchum, W. Q.	1,050 00
1909	Gauthier, Avila	204 00	1922	Kimber, W.	874 92
1912	Gauthier, Pierre	476 16	1917	King, Richard M.	1,189 92
1923	Gendreau, A. B.	1,176 00	1912	Kinney, John	610 68
*1914	George, F. J.	259 95	1918	Kirkpatrick, John A.	1,260 00
1915	Gilkie, H. A.	417 01	1918	Kirwan, Philip T.	1,470 00
1916	Gillespie, Ed.	699 96	*1922	Lalande, J. B. A.	875 00
1922	Gisborne, F. H.	4,200 00	1920	Landor, A.	801 00
*1920	Glover, J. E.	285 60	1922	Lane, H. B. S.	1,960 00
1921	Godwin, Jas.	806 40	1921	Langstone, W. H.	1,075 44
1922	Golden, J. J.	1,083 96	1922	Lantier, A. A.	2,164 56
1897	Gordon, J. McD.	785 28	1916	Lapointe, T. H.	979 92
*1894	Gouin, W. G.	12 50	1923	Larivière, C.	1,780 32
*1924	Goulet, I.	998 40	1907	Larose, Anatole	1,020 00
1920	Gow, W. J.	1,526 28	*1915	Larose, Joseph	132 00
1918	Graham, Wm. J.	1,399 92	1921	Lawless, M.	785 28
1922	Gray, H. H. O.	1,470 00	1924	Lawrence, J. W.	524 16
1903	Grenier, Adolphe	151 32	1909	LeBlanc, Chas. P.	191 28
1921	Grimason, T.	1,399 92	1921	LeBlanc, J. J.	330 00
1922	Hale, J. S.	1,805 13	1923	Ledoux, Jos.	1,050 00

Appendix No. 10—Continued

AMOUNTS paid as superannuation during the year ended March 31, 1929, to employees retired prior to March 31, 1928—*Continued*

Retired in	Name	Amount paid	Retired in	Name	Amount paid
	SUPERANNUATION No. 1	$ cts.		SUPERANNUATION No. 1	$ cts.
1903	Leduc, C.	128 04	1916	McCormick, Edgar	619 66
1919	Lefebvre, Louis	1,119 96	1921	McCulloch, John Oliver	1,148 64
1907	Legault, O.	180 00	1925	McDonald, B. R.	2,155 92
1903	Leguerrier, J. B.	112 20	*1922	McGill, A.	2,205 00
*1921	Le Moine, Jules	420 92	1921	McGovern, J. J.	1,119 96
1922	Letteau, H.	981 48	1919	McKeown, J. A.	544 56
1897	Lightfoot, F. C.	502 80	1921	McKinley, C. H.	139 92
1895	Lilley, J. H.	142 80	1922	McKinnon, M.	1,413 96
*1917	Lithgow, J. T.	210 00	1918	McLaren, Duncan	319 38
*1908	Lloyd, Frank	309 60	1922	McLelland, N.	1,084 08
1923	Loan, J. B.	979 20	1913	McMordie, A.	481 92
1914	Low, A. P.	3,099 96	1909	McNair, W. C.	368 28
1903	Lussier, Joseph	264 00	1922	McNeil, Neil	1,549 32
1899	Lynes, K.	442 00	1925	McNeal, W. L.	1,155 60
1922	Lynn, J.	758 40	1911	McNicol, John	1,470 00
1922	Lynton, T. C.	1,082 64	1899	McRobert, W. H.	288 00
1927	MacDonald, Henry	1,218 00	1923	McRobie, A. J.	1,260 00
*1911	Macdonald, James	437 50	1923	McRobie, J. T.	1,092 00
1914	MacDonald, Jno. G.	520 44	1909	McShane, J. F.	372 00
1921	Mackay, J. E. B.	1,030 44	1907	McTaggart, John	552 00
1902	MacKillop, J.	240 00	1917	Nesbitt, Margaret W.	699 96
1910	Mackinnon, W. C.	637 92	1916	Nevins, N.	302 40
*1917	MacLaren, Jno. S.	700 00	1897	Newberry, I. M.	207 60
1924	MacLeod, J. O.	2,100 00	1906	Newbigging, Thomas L.	476 40
1919	Macpherson, W. T.	1,224 00	1909	Newbury, C. W.	550 00
1920	Magee, R. G.	979 92	1923	Newbury, J. C.	2,799 96
1912	Mailman, J. A.	464 76	1911	Newby, Frank	1,119 96
1907	Mainguy, Philip A.	559 92	1917	Newcomb, Geo. H.	1,560 24
1919	Malcolm, Jas.	951 96	1907	Newman, John J.	404 60
1908	Maracle, F. K.	366 36	1914	Newsome, A. E.	297 24
1920	Marceau, J. O.	1,758 48	1922	Nicholls, Wm.	1,046 04
1920	Marshall, J. W.	2,380 00	1922	Noel, J. P.	841 44
1922	Martin, J. C.	2,166 84	1912	Nolet, J. G.	636 96
1906	Martin, Jules G.	156 00	1897	Nugent, James	156 00
1915	Mason, Frederick	1,516 66	*1912	O'Brien, W. D.	488 04
1925	Masse, A.	1,119 96	1924	O'Connell, Ellen M.	1,386 00
1926	Masters, Chas. H.	2,776 66	1904	O'Connor, Mrs. Eleanor	367 92
1921	Mathieu, A.	1,033 20	1922	O'Connor, Jas.	1,256 64
1922	Matthewman, E. H.	1,988 00	1917	O'Connor, John F.	1,650 72
1916	May, Ida, M.	696 00	*1918	O'Donoghue, D.	998 16
1920	Maynard, M. W.	1,959 96	1922	O'Donoghue, M. J.	1,239 96
1922	Mercer, R. G.	1,991 16	*1914	O'Gorman, Cornelius	238 16
1917	Mercer, Wm. O.	1,959 96	1914	O'Leary, Thos. Jos.	919 92
1922	Merrick, K.	1,171 32	1922	Oliver, F. A.	639 96
*1922	Middleton, A. T.	1,560 96	1919	O'Meara, D. D.	2,100 00
1903	Miggins, M.	216 00	1922	O'Neil, H. T.	1,050 00
1907	Miller, John G.	687 12	1915	O'Regan, W. H.	972 12
1907	Milne, Chas.	240 36	1925	Orr, D. G. E.	1,113 00
1922	Mitchell, Wm.	1,082 64	1913	Ouellet, F. X.	499 20
1924	Moffat, R. B. E.	2,062 66	1912	Owen, Charles	489 96
1922	Mollard, J. T.	1,260 00	1921	Panneton, C. E.	932 88
1920	Montizambert, Dr. Fred	3,791 64	*1920	Paradine, Thos.	495 40
1922	Moon, F. G.	2,162 16	1919	Parish, G. H.	1,312 50
1912	Moore, T. E.	330 44	1914	Park, Robt. H.	741 00
1925	Moren, M. J.	1,431 48	1909	Parker, Lewis	1,189 92
1904	Morris, Chas. E.	60 00	1924	Parry, W. S.	1,008 00
1918	Morrissey, John	582 12	1923	Parson, B. A.	1,092 00
1909	Mulhern, M. M.	810 60	1922	Patrick, Mary	1,046 04
1912	Mullin, Thos.	288 24	1922	Payne, Edward	960 00
1914	Mundy, W. A.	532 08	1904	Pearce, Wm.	1,380 00
1901	Murphy, Wm.	415 92	1912	Pearson, W. O.	396 55
1919	Murray, J. P.	1,119 96	1917	Perkins, Francis N.	469 50
1916	Myers, Robt.	654 36	*1922	Pierson, Chas.	271 02
1921	McAuley, D.	210 00	1910	Plamondon, O.	495 96
1925	McCarthy, Nona	1,056 96	1897	Plante, Gaspard	264 00
1906	McClive, John	480 00	1907	Plunkett, Joseph M.	296 28
1921	McConnell, R. G.	3,950 88	1921	Pollock, G. B.	1,032 48

Appendix No. 10—Continued

AMOUNTS paid as superannuation during the year ended March 31, 1929, to employees retired prior to March 31, 1928—*Continued*

Retired in	Name	Amount paid	Retired in	Name	Amount paid
	SUPERANNUATION No. 1	$ cts.		SUPERANNUATION No. 1	$ cts.
1918	Pope, Chas.	1,470 00	1921	Spencer, J. H.	1,119 96
1912	Porter, E. H.	210 00	1924	Springate, Geo.	895 92
1918	Potter, M. J.	1,540 00	1921	Sproule, J. F.	953 40
1913	Pottinger, David	4,899 96	1920	Stanton, C.	2,916 66
1919	Power, F. J.	1,119 96	*1921	Steacy, C.	806 00
1917	Power, John R.	1,050 00	1919	Steele, E. Y.	1,120 00
1922	Pringle, Jas.	993 74	1924	Stephenson, E. F.	3,033 29
1924	Prud'homme, L. T.	1,680 00	1925	Stevens, W. F.	1,283 76
*1914	Pryor, Oswald	862 00	1905	Stewart, Chas. R.	452 16
1915	Ralph, Arthur R. F.	603 96	1924	Stewart, D.	2,100 00
1921	Ramsden, J. A.	1,160 64	1914	Stewart, H. E.	712 92
1917	Ramsey, W. J.	847 00	1921	Stewart, W. C. E.	2,055 91
1922	Ratchford, C. E.	1,050 00	1919	Stokes, Wm.	980 00
1924	Raymond, R.	1,119 96	1919	Storr, Ira W.	2,310 00
1928	Reading, T. J.	1,019 64	1924	St. Denis, E. H.	2,736 96
1897	Reed, Hayter	938 63	1922	St. Onge, J. A.	721 20
1912	Reeves, C.	602 52	1926	Strange, J. Campbell	2,730 00
1917	Renton, John L.	910 00	1927	Strong, William	484 44
1914	Richard, Alphonse	420 00	1916	Sutherland, Geo. C.	223 92
1921	Richardson, H. E.	752 16	*1901	Suthern, F.	22 50
1906	Richardson, William	388 21	1925	Swaine, G. B.	297 48
1902	Richey, W. M.	534 60	1922	Sweetnam, G. B.	1,512 00
1902	Rivers, Robt.	260 00	1911	Symes, P. B.	1,586 64
1922	Robert, P.	841 44	1920	Taché, J. C.	2,046 24
1923	Robinson L.	1,099 56	*1915	Talbot, Octave Z.	1,020 81
1923	Roche, Geo.	1,088 00	1897	Tansey, D.	300 00
1922	Rochester, F. K.	2,171 16	1924	Taylor, C. J.	2,331 00
1921	Rodgers, Geo.	723 72	1927	Taylor, E. H.	1,176 00
1895	Russell, A. J. H.	672 00	1917	Theakston, Major John	657 24
*1915	Russell, Wm.	622 86	1901	Thomas, G. A.	351 96
1922	Rutherford, Jas.	1,899 24	1922	Thompson, A. G.	2,391 45
*1903	Sargent, Robert	16 77	1927	Thompson, D.	263 01
1922	Saucier, X.	2,346 24	1922	Throop, A. W.	2,535 24
1918	Saulnier, John	181 92	*1921	Till, Thomas M.	1,067 40
1921	Saunders, C. J.	746 64	1913	Toupin, F. X. J. A.	1,635 00
1910	Scholes, Adam	422 76	*1912	Turgeon, C. E.	559 98
1903	Scott, John	504 00	1918	Turner, H. H.	1,434 96
1903	Seely, Neil	216 00	1906	Upper, A. H.	187 08
1923	Séguin, F. O. O.	1,936 56	1921	Valeur, Jos. A.	1,027 80
1924	Sewell, T. C.	1,218 00	*1911	Venning, R. N.	1,981 32
1909	Seymour, A. J. B.	540 00	1917	Vézina, Ulrich	1,256 04
1923	Shannon, S. L.	4,200 00	1925	Wagner, D. J.	1,920 60
1917	Shaughnessy, John	768 00	1921	Wagner, M. A.	889 68
1888	Shaw, G. A.	403 20	1921	Walker, E. M.	1,445 64
1922	Shaw, H. S.	1,556 52	1897	Walker, Wm. B.	207 96
1919	Shaw, Mary	736 20	1907	Wallace, J. J.	1,749 96
1913	Shaw, M. M.	389 00	*1919	Walsh, Robert	734 94
1921	Sherwood, H.	1,872 50	1915	Ward, Joseph	648 12
1924	Simard, Jean B. M.	1,073 28	1915	Warwicker, W. S.	655 84
1921	Simard, Léon	564 36	1923	Watson, C.	1,224 00
1922	Simons, J.	1,260 00	1921	Watson, Jas. W.	1,218 00
1922	Simpson, A. F.	2,358 00	1913	Webber, E. M.	552 00
1919	Simpson, H. E.	1,008 00	1922	Wells, W. J.	1,016 22
*1899	Sims, J. C.	700 00	1903	Wheeler, F. C.	352 00
1922	Skelly, E. J.	1,084 08	1916	Whitcher, A. H.	1,470 00
1921	Smith, C. E.	1,260 00	1917	White, Robt. S.	1,890 00
*1921	Smith, D. J.	839 97	1922	Wigle, A.	2,196 84
1908	Smith, E. L.	481 00	1900	Williams, Jos.	300 00
*1921	Smith, Geo.	1,067 49	1908	Williams, Thomas	1,782 00
1913	Smith, Gertrude	591 50	1918	Wills, Geo. W.	1,302 00
*1914	Smith, John	169 92	1901	Wilson, I. H.	261 24
1902	Smith, J. Rose	980 00	1909	Wilson, John	380 28
1922	Smith, Mark	750 84	1920	Wilson, Jos.	1,016 88
*1922	Smith, T. J.	93 33	1922	Wilson, W. T.	1,875 14
1925	Sowter, T. W. E.	1,302 00	1918	Wood, E. B.	1,470 00
1918	Sparks, Robert	1,248 24	1920	Wood, John	619 68
1919	Spence, F. H.	1,050 00	1901	Woodland, I. H.	120 36

Appendix No. 10—Continued

AMOUNTS paid as superannuation during the year ended March 31, 1929, to employees retired prior to March 31, 1928—*Continued*

Retired in	Name	Amount paid
	SUPERANNUATION No. 1	$ cts.
1917	Wright, Jos	1,734 45
1922	Wright, R. P	1,084 08
1912	Young, G. H	1,750 00
	Less transfer from No. 1 to No. 2 Fund—adjustment	−1,183 50
	Total, Superannuation No. 1	573,489 55
	SUPERANNUATION No. 2	
	Civil Service Superannuation and Retirement Act, 1893, Chap. 17 ,R.S. 1906	
1925	Atkinson, J. H. C	1,041 60
1918	Bégin, Ludger	431 88
1916	Bernard, Henry	431 88
1922	Caron, Louis	702 36
1917	Davieau, P	384 00
1920	Farrell, F. J	1,052 76
1920	Farrow, H. W	799 20
1921	Francis, Jno	625 08
1922	Grey, C. L	1,386 00
1912	Hoey, Wm	327 00
1926	Humphrey, Wyndham	1,066 32
1922	Johnston, R. A. A	2,593 44
1919	Kennedy, J	699 96
1926	Kissick, W. J	906 72
1924	Lambert, T. E	2,064 60
1927	Lamere, Joseph	1,193 40
1922	Leyden, M	1,024 08
1919	Loftus, S. R	714 92
1927	MacCallum, J. S	1,173 60
1923	MacLaughlin, T. J	1,592 50
1924	Martin, E. S	1,011 12
1921	Mitchell, Thomas	923 28
1921	Montanari, A. N. P	575 47
1913	Morgan, M. H	313 80
1927	McCandlish, Alfred	1,696 20
*1923	McLeod, E. B	900 00
1920	McMartin, D	723 60
1913	O'Brien, A. H	1,741 50
1913	Osborne, F. A	578 64
1921	Paradis, Eugène	1,944 00
1916	Phelan, Dr. Daniel	1,386 00
1927	Picken, Thos	702 72
1923	Porter, N	1,207 59
1925	Reading, W. B	1,591 92
1925	Riggs, Jas	998 16
1925	Ring, M. J	1,035 36
1913	Roe, Geo. H	452 76
*1922	Rogers, T	261 00
1913	Ross, H. E	144 00
1917	Rouillard, A	643 90
1911	Ryan, W. L	480 00
1914	Scott, Jno. L	376 08
1917	Shaw, Margaret	528 00
1922	Simpson, A. M	909 96
1924	Thompson, W. H	882 00
1927	Williams, M. A	1,539 96
1913	Wood, S. J	328 68
*1920	Wright, J. P	66 66
1915	Young, R. St. B	436 32
	Plus transfer from No. 1 to No. 2 Fund—Adjustment	+1,183 50
	Total, Superannuation No. 2	45,773 48

Retired in	Name	Amount paid
	SUPERANNUATION No. 3	$ cts.
	(Printing Bureau)	
1920	Allan, William C	942 84
1920	Askwith, Francis	566 16
1920	Baker, Alexander	678 00
1920	Baker, Guy C	678 00
1920	Belleau, Laurent A	922 56
1920	Bonnell, Amos	678 12
1920	Charrier, Médéric	557 44
*1920	Connelly, Margarite	156 68
1920	Donnelly, John	677 88
1920	Ducharme, Alfred	678 00
*1920	Farrer, Sarah J	39 82
1920	Gagné, Napoléon	678 00
1920	Godin, Théophile	678 00
1920	Gorman, Thos. M	678 12
1920	Jobin, Jean Baptiste	710 40
1920	Juneau, Pierre A	678 00
*1920	Lecourt, Raphael	265 79
1920	Lepine, Jos	611 28
1920	Mahoney, Johanna	284 88
1920	Maurier, Marius J	683 64
1920	Reynolds, William H	922 68
1920	Richard, Joseph E	678 00
1920	Rigby, Catharine T	290 88
1920	Savery, Sophie	290 88
1920	Seguin, Joseph	613 08
1920	Servant, Louis	553 92
1920	Teague, Wm. C	683 64
1920	Thoburn, Daniel	780 96
1920	Twoy, Mary	290 76
1920	Valiquette, Mary Ann	165 12
1920	Wellard, Alfred	678 00
	Total, Superannuation No. 3	17,791 53
	SUPERANNUATION No. 4	
	Public Service Retirement Act of 1920	
1922	Abbey, A. B	471 24
1922	Abercrombie, R	145 80
1924	Ackerman, A	507 48
1920	Adams, J. A	398 88
1924	Adams, W. A	724 50
1921	Adamson, W. J	573 72
1924	Addison, Robt	845 88
1924	Aird, G. D	561 60
1921	Aitkens, Alex	436 80
1921	Alexander, F. J	1,094 76
1924	Alexander, John F	497 40
1923	Allan, H	933 96
1924	Allan, J. B	972 36
1923	Allen, J. W	116 16
1924	Allen, W. A	293 58
1924	Allin, W. W	360 00
1924	Almon, G. W. R	1,014 96
1924	Amey, W. J	533 16
1921	Amira, C. A	402 36
1924	Andrews, S. D	727 92
1922	Annand, T. E	794 52
1923	Antoney, C. C	632 33
1924	Appelton, Edward	975 48
*1921	Archer, W. A	236 49
1924	Ard, John	216 00

Appendix No. 10—Continued

AMOUNTS paid as superannuation during the year ended March 31, 1929, to employees retired prior to March 31, 1928—*Continued*

Retired in	Name	Amount paid	Retired in	Name	Amount paid
	SUPERANNUATION No. 4	$ cts.		SUPERANNUATION No. 4	$ cts.
1921	Armstrong, E. M.	985 32	1924	Binks, T. C.	324 48
1922	Armstrong, F. J.	750 00	1924	Bishop, Thos.	474 89
1924	Armstrong, F. S.	649 92	1922	Bissonnette, L.	750 12
*1924	Armstrong, John	16 38	1924	Black, John	2,400 00
1923	Armstrong, Nelson	108 48	1924	Black, T. McC.	539 52
1921	Atkins, B. R.	651 00	1924	Blais, J. C. F.	660 00
1924	Atkinson, H.	1,997 40	1923	Blake, F. L.	1,365 00
1922	Atkinson, W.	216 12	1924	Blanchard, I. M.	266 64
1924	Aube, W.	594 64	1923	Blaxland, S. W.	171 96
1922	Auger, A. L.	1,390 00	1924	Blette, P.	679 32
1922	Auger, V.	897 72	1922	Blois, J.	709 44
1924	Aylesworth, Geo. A.	504 00	1924	Boileau, J.	240 72
1924	Babin, E.	750 00	1924	Boivin, F.	282 00
1924	Babington, F. W.	1,650 00	1924	Boles, Thos.	389 28
1921	Bacon, J.	118 44	1921	Bolton, M. E.	502 56
1921	Badeau, N.	881 52	1924	Booth, John	109 92
1924	Bagnell, E.	239 16	1922	Booth, Thos.	106 80
1924	Baillie, C. H.	480 00	1924	Bottomley, W. G.	205 26
*1924	Bajus, W. J.	345 48	1922	Bouchard, P. A.	340 20
1924	Baker, Wm.	849 96	1922	Boudreault, F.	99 96
1924	Ballantine, A.	447 84	1924	Boulais, D.	197 76
1924	Bambrick, Edward	487 56	1924	Boulay, M. L. C.	650 00
1921	Barfoot, S. R.	1,200 00	1922	Bourbonnais, O.	89 64
1924	Barry, E. J.	291 00	1922	Bourgault, C. E.	316 66
1924	Bart, Alfred	924 12	1924	Bourget, A.	473 88
1922	Barton, A.	267 00	1924	Bourke, M.	446 64
1924	Barton, Samuel	37 92	1924	Bouvier, Ulric	200 76
1924	Bastien, J. A.	235 68	1921	Bowden, G. M. M.	649 92
*1924	Batterton, Thos.	283 39	1924	Bowman, A.	168 00
1923	Battle, K. M.	431 88	1921	Boyd, J. C.	918 60
1924	Baylie, Chas.	1,041 60	1922	Boyd, Jno.	390 60
1924	Beardsley, G.	447 96	1924	Boyer, M. A.	940 56
1922	Beauchesne, J. A.	432 72	1923	Boyle, Jas.	280 80
1924	Beaudet, Captain J.	418 20	1923	Boyle, Robt.	259 20
1922	Beckett, E. W.	393 24	1924	Brabazon, A. J.	1,560 00
1924	Bedard, Eugene	661 68	1923	Braden, E. P.	647 88
1922	Bedard, J.	626 28	1921	Brady, J. C.	483 00
1924	Bedard, V.	462 00	1924	Brault, L.	463 92
1924	Beddoe, W. A.	985 60	1921	Breen, R.	559 92
*1924	Beer, F. H.	402 79	1923	Bremner, C.	351 00
*1924	Beers, F.	6 28	1921	Brice, E. E.	373 33
1924	Begin, P. A.	1,050 00	1924	Brisson, J. B.	223 56
1921	Belanger, Adrien	171 12	1924	Brodie, A. W.	324 00
1922	Belanger, August	405 00	1922	Brooks, H.	163 08
1921	Belanger, G.	644 52	1924	Brossard, T.	367 92
1922	Belanger, L.	533 28	1923	Brosseau, S. H.	283 32
1924	Belanger, Philias	275 00	1922	Brown, Agnes L.	540 83
1924	Bell, F. S.	393 24	1924	Brown, Alex.	1,104 96
1924	Bell, J. J.	559 92	1924	Brown, Allan	685 44
1924	Belleau, J. A.	1,290 00	1924	Brown, Denis	414 60
1924	Belleperche, A. J. E.	888 96	1924	Brown, George B.	474 36
1924	Bennett, C.	468 72	*1921	Brown, J. C.	1,498 68
1923	Bennett, W. A.	326 28	1922	Brownlow, W.	1,099 92
1924	Bennett, W. V.	1,224 90	1924	Brunet, L. B. C.	636 00
1924	Bennie, J. K.	804 96	1921	Bryce, P. H.	1,133 28
1924	Benson, P. H. C.	1,165 44	1924	Buchanan, D. J.	405 00
1924	Berard, J. C.	747 48	1922	Buchanan, G.	175 92
1922	Bergeron, Jos.	541 44	1921	Bucke, M.	530 04
1921	Bergeron, N.	632 40	1924	Bunelle, Geo. L.	1,050 00
1921	Bergevin, W.	265 68	1921	Burgess, T.	548 28
1924	Bergin, Jas.	819 00	1923	Burke, Hy.	360 60
1923	Berlinquet, F. X. T.	1,440 00	1924	Burnett, W. B.	628 56
1922	Bernasconi, G. A.	1,509 36	1924	Burns, A. W.	783 00
1924	Bernier, Chas. C.	700 00	1923	Burns, Margaret	409 44
*1922	Bernier, Jos. Z.	517 44	1923	Burns, Mary	409 44
1921	Beroard, C. P. V.	1,404 12	1923	Burns, R. J.	826 00
*1920	Bigney, J. E.	301 61	1924	Burroughs, A.	756 00

Appendix No. 10—Continued

AMOUNTS paid as superannuation during the year ended March 31, 1929, to employees retired prior to March 31, 1928—*Continued*

Retired in	Name	Amount paid	Retired in	Name	Amount paid
	SUPERANNUATION No. 4	$ cts.		SUPERANNUATION No. 4	$ cts.
1924	Burrows, Jos	254 10	1924	Cooke, Chas. A	1,089 96
1922	Bushen, Josiah	351 24	1921	Copp, A. O	336 00
1924	Busselle, A. W	840 00	1922	Corbeil, L	885 00
1923	Cairns, A. E	553 68	1924	Corkery, John	1,496 64
1921	Caldwell, J. W	1,026 60	1924	Corkum, J. S	29 97
1921	Cameron, E	112 16	1921	Corner, K	518 52
*1921	Cameron, Jno	40 40	1924	Cosgrave, Robt	549 36
1924	Campbell, A. E	396 60	1924	Cosgrove, T	484 99
1924	Campbell, D. A	240 00	1921	Cosgrove, Geo	622 20
1922	Campbell, David	212 52	1924	Cosky, L	900 00
1921	Campbell, J. M	612 84	1924	Côté, Alfred	936 48
1924	Campbell, Jno	757 44	*1923	Côté, I	40 57
*1921	Campbell, M	225 53	1924	Courbron, E	282 00
1921	Card, Chas	248 64	1923	Cournoyer, B	570 48
1922	Carey, B. T	547 44	1924	Cournoyer, Jean	77 55
1921	Carey, Jno. A	158 28	1924	Courtney, D. G	1,136 64
1924	Carmichael, D	350 40	1922	Coutts, J. J	575 64
1924	Caron, F. X	394 32	1922	Couture, C. A	1,035 00
1923	Carpentier, C	306 00	1921	Cowling, R	549 24
1923	Carr, Thos	232 32	1924	Cox, Mrs. S. S	805 92
1924	Cartier, L. A. D	924 00	1924	Cragg, Jno	195 00
1924	Carty, John	399 96	1924	Craig, B. F	1,092 00
1923	Cashen, Jas	387 31	1921	Craig, Geo	1,393 32
1922	Casselman, L. J	144 96	1921	Craig, Jas	265 80
1924	Caven, John	483 00	1923	Craig, J. A	396 00
1924	Chadwick, F	1,140 00	*1921	Craig, R. W	494 93
1922	Chagnon, J. E	265 68	1923	Craig, W. E	410 76
*1921	Chamberland, H. C	39 45	1924	Cranston, A. J	660 72
*1920	Chambers, L. H	1,137 52	1921	Crépeau, Wm	331 08
1922	Chambers, S. E	609 48	1924	Crilly, Wm. H	189 00
1924	Champagne, T	511 80	1924	Crites, D. A	776 52
1922	Chaplin, T	314 40	1922	Croucher, Geo. A	429 96
*1921	Chaput, Z	21 84	1924	Cruickshank, Geo. A	645 60
1924	Charbonneau, N	605 94	1921	Cummings, W	336 84
1923	Charland, J	406 08	1924	Curry, Chas	204 00
1924	Charlier, E	639 03	1924	Custaloe, R	416 64
1924	Charlton, C. H	531 24	1924	Cyr, E	205 30
1924	Chartrand, Chas	594 60	1923	D'Aoust, A	174 72
1924	Chartrand, D	231 48	1924	Daley, Robt	436 44
1921	Chartrand, G	222 00	1924	Dalglish, G. M	625 32
1922	Chevrier, B	630 48	1924	Dallain, A. J	1,140 00
1922	Chinic, E. N	589 92	*1921	Dargavel, W. G	293 44
1924	Chisholm, John J	759 96	1921	Dauphin, A	216 60
1924	Chrystal, A. S	234 00	1924	Daveluy, J. A. P	857 76
1924	Church, Geo. C	372 00	1921	David, T	264 48
1923	Chute, F. B	128 28	1924	Davis, L. C	266 64
1924	Clancy, M	660 00	*1924	Davy, Edward	309 38
1922	Clapin, E	307 92	1924	Davy, E. S. F	453 24
1922	Clarke, C. H	795 00	1924	Dawson, J. P	1,380 00
1922	Clarke, H. G	540 00	1924	Dawson, Dr. W. B	2,100 00
1924	Clarke, John D	1,733 28	1924	Deasy, Thos	1,106 64
*1924	Clarke, M. F	1,033 99	1924	Deavy, Thos	659 40
*1924	Clarke, N	225 00	1923	Dechêne, A. M	906 88
1923	Clarke, R. O	447 36	1924	Delaney, John	750 00
1924	Cleary, M	305 88	1923	Delfosse, A. P. V	281 64
1923	Clement, A	379 44	1922	Deneault, Wm	85 02
1923	Clement, G. T	540 00	1921	Denechaud, C	502 56
1924	Clendinneı, C. A. E	900 00	1924	Dery, Joseph	727 44
1924	Clerke, Robt	661 20	1924	Deschesnes, M	203 16
1922	Close, C. W	980 00	1924	Desforges, X	236 16
1923	Coates, J. T	609 96	1924	Desilets, J. A	754 08
1924	Cochrane, Leo. W	688 68	*1921	Desjardins, P	292 71
1924	Cogswell, O. H	952 27	1922	Desmarais, H. O	139 68
1924	Cohoon, Thos	288 00	1923	Desmarais, S	472 68
1921	Colley, F	471 84	1923	Desrochers, Z	609 36
1924	Collins, F. A	607 44	1924	Desroches, M. L. C	393 72
1921	Connolly, W	1,087 92	1922	Desrosiers, L. A	1,754 16

Appendix No. 10—Continued

AMOUNTS paid as superannuation during the year ended March 31, 1929, to employees retired prior to March 31, 1928—*Continued*

Retired in	Name	Amount paid	Retired in	Name	Amount paid
	SUPERANNUATION No. 4	$ cts.		SUPERANNUATION No. 4	$ cts.
1924	Devine, Patrick	702 00	1924	Farrell, Wm. J.	933 24
1923	Dickson, W. H.	790 20	1924	Farrow, M. Y.	795 00
1924	Dionne, P.	461 64	1922	Farrer, Emma E.	229 56
1924	Doherty, Chas. G.	211 56	1924	Faulkner, Geo.	156 72
1924	Doherty, I. W.	539 52	1924	Favelle, John.	376 56
1924	Doig, James	467 16	1924	Ferguson, D.	832 47
1922	Donaldson, Jno.	294 12	1923	Ferguson, J. N.	871 80
1924	Donovan, W. M.	779 76	1924	Ferriman, W. J.	714 48
1922	Dooley, J. J.	244 08	1921	Finkle, H. J.	665 83
1924	Doran, Wm.	108 00	*1921	Finlayson, A.	221 36
1924	Dorion, D. N.	505 08	1921	Fisher, C. A. L.	127 02
1922	Dorval, G. S.	549 60	1924	Fitzgerald, E. W.	943 32
1921	Douglas, R. C.	1,283 34	1924	Fjeldsted, T.	139 92
1923	Doyle, E. F.	577 50	1924	Fleming, G. S.	1,176 00
1922	Doyle, H. E.	496 92	1921	Fleming, Wm.	289 92
1923	Drake, E. F.	2,274 96	1924	Fletcher, Hugh.	465 72
1924	Drapeau, J. A. P.	936 24	1921	Fletcher, R. W.	923 52
1924	Drapeau, P.	771 60	*1921	Flett, Jas.	97 49
1924	Drew, A. G. F.	493 44	1921	Flynn, M.	305 16
1924	Drillio, Geo.	565 44	1924	Foran, J. K.	1,722 48
1924	Driscoll, Daniel	529 56	1922	Ford, Mabel.	666 36
1924	Driscoll, James L.	44 96	1924	Foreman, H.	693 48
1924	Driscoll, Patrick	306 00	1923	Forest, S.	753 96
1922	Drolet, A.	250 68	1924	Forget, A.	647 40
1921	Drolet, J.	220 08	1924	Forrest, Alex.	1,625 28
1924	Drolet, Pierre	277 20	1924	Forsyth, J. R.	1,078 68
1922	Dubé, Jos.	503 88	1924	Fortier, A.	1,643 28
1924	Dubois, A.	546 60	1924	Fortin, F. X.	786 48
1923	Duclos, Geo.	862 92	1924	Fortune, Robt.	315 72
1924	Duclos, P.	954 24	1924	Foster, J. H.	476 64
1924	Dugal, A.	660 00	1924	Fotheringham, Geo.	666 60
1921	Dunbar, R. C.	1,031 28	1922	Fowler, J. J.	241 56
1921	Duncan, W.	315 00	1921	Francoeur, A.	166 56
1921	Dunlop, Jno.	425 16	1924	Fraser, D.	295 56
1924	Dunn, J. A.	714 12	1924	Fraser, Jas. L.	128 28
1922	Duplessis, L.	430 56	1921	Fraser, M.	601 08
1924	Dupuis, A.	213 48	1923	Fredenburgh, G. C.	360 00
1924	Dyble, John H.	378 00	1922	Frenett, J. L.	147 48
1924	Dye, Benjamin	198 00	1920	Frink, J. H.	980 52
1922	Earl, R. W.	474 96	1924	Fuller, R. L.	1,271 04
1924	Eddie, Chas.	722 40	1924	Fullerton, John.	518 76
1921	Eddy, J. A.	778 08	1924	Fullerton, R.	137 37
1922	Edgar, J.	699 96	1921	Fulthorp, G. E.	342 87
1924	Edgar, W. W.	900 00	1923	Furnival, S.	270 00
1924	Edwards, J. F.	570 57	1922	Gagne, F. X.	799 92
1922	Eldridge, C. C.	900 00	1921	Galbraith, Wm.	481 92
1924	Elliott, Chas.	910 56	1924	Gamble, S.	142 92
1921	Elliott, C. H.	750 00	1924	Gammon, T.	203 40
1921	Elliott, Eliza.	263 40	1924	Gaston, John.	236 16
1924	Elliott, G. W.	949 92	1924	Gaudet, P.	984 72
1924	Elliott, Thos.	478 08	1921	Gaumond, Thos.	383 40
*1921	Ellis, J. H.	50 86	1922	Gauvin, Joseph C.	820 68
1924	Ellis, Wm. T.	535 92	1924	Gauvreau, Alex.	343 08
1921	Elsterman, F. W. B.	311 66	1924	Gauvreau, J. A.	480 00
1924	Emery, H.	727 92	1924	Gauvreau, N. B.	1,032 00
1921	Emmett, C. D.	354 36	1921	Genest, J. B.	611 04
1921	Emmett, F.	289 08	1924	Gent, A.	368 52
1924	England, Frederick	306 96	*1921	Georgeson, J.	159 04
1923	Erratt, W. H.	295 08	1921	Germain, M.	245 76
1922	Ewing, R.	639 32	1924	Gervais, Wm.	620 28
1924	Eynouf, Geo.	146 51	*1923	Gibbons, John.	24 72
1923	Fahey, J.	681 00	1921	Gibbons, J. A.	443 19
1924	Fairen, F.	760 44	1924	Gibson, John.	309 24
1921	Farquaharson, D. R.	715 56	1923	Giddens, F. W.	1,264 92
1923	Farrel, Julia.	534 96	1923	Giffen, I. L.	415 56
1924	Farrell, Minnie J.	832 50	*1924	Gilchrist, James.	129 23
1924	Farrell, P.	495 00	1922	Gillespie, Wm.	401 76

Appendix No. 10—Continued

AMOUNTS paid as superannuation during the year ended March 31, 1929, to employees retired prior to March 31, 1928—*Continued*

Retired in	Name	Amount paid
	SUPERANNUATION No. 4	$ cts.
1921	Gillis, Jno	429 36
1924	Gingras, E. X	1,050 00
1921	Girard, Chas	250 08
1924	Giroux, W. J	377 40
1924	Glover, Thos	229 08
1921	Goodday, L	401 28
1924	Goodhue, M. L. E. B	603 72
1924	Gordon, A. E	175 92
1924	Gordon, F. G	584 32
1924	Gore, W. J	414 00
1922	Goudie, John G	780 00
1924	Gould, I. A	1,174 92
*1924	Grace, P. J	290 18
1924	Graham, A	78 72
1924	Graham, H. C	1,608 72
1921	Graham, S. L. C	497 88
1922	Graham, W	243 24
1921	Graham, W. R	1,948 32
1924	Granger, I	351 96
1921	Grant, A. F	366 60
1922	Grasse, P. L	555 75
1924	Gray, Geo. W	339 96
1924	Grece, Wm	549 00
*1924	Green, M	106 63
*1923	Green, Thos	261 69
1924	Gregory, Chas	300 00
1924	Grenier, Jos	454 56
1924	Grenier, S	235 80
1920	Grey, F. W	492 60
1922	Grice, Jno	675 58
1923	Grieve, A. D	1,009 92
1923	Griffith, W. L	3,246 88
1924	Grison, A. A	1,138 32
1924	Guenet, A	354 96
1923	Guerard, A. E	534 66
1924	Guindon, A	415 92
1924	Hackett, Annie	744 96
1924	Hagen, S. C	317 16
1921	Hagerty, B	561 48
1924	Hall, Geo. A	1,034 40
1924	Hall, Richard	469 92
1924	Hall, R. P	636 35
1924	Halle, F	1,072 20
1924	Halpenny, J. H	540 00
1921	Hamel, A	655 80
*1924	Hamel, M	96 06
1922	Hamilton, I	711 24
1921	Hamilton, P. J	624 84
1924	Hamilton, W. B	597 00
1924	Hamlett, O	228 00
1924	Hampshire, C. C	840 00
1924	Hand, E. J	561 12
1924	Handy, Jos	729 72
*1924	Hanley, H	269 28
1924	Hanlon, Mary A	541 66
1921	Hanlon, B. J	516 84
1923	Hanson, P	315 84
1922	Harding, Jas	344 04
1924	Harris, G. M	310 80
1924	Harris, T. A	594 00
1923	Harvey, J. W	1,008 00
1923	Hastings, T. A	828 00
1921	Haws, W	426 84
1924	Hay, Jos	439 92
1921	Hayne, Thos	511 20
1920	Heath, Geo	328 08
1923	Hebert, John	726 24
1924	Heeschen, C. C	561 60
1921	Heffler, E	412 92
1921	Heise, W	272 64
1923	Hembrough, Thos	762 63
1924	Henderson, A	560 56
1924	Henderson, Wm	1,500 00
1921	Henley, I. C	385 22
*1924	Henshaw, G. H	624 74
1924	Heppelle, E	179 24
1924	Herbold, A	600 00
1921	Herchmer, F. K	1,434 96
1922	Hicks, A. M	832 81
1922	Hickson, R. J	907 08
1924	Higgins, Wm	196 56
1924	Higman, O	2,179 08
1924	Hill, J. F	1,168 20
1922	Hill, R. T	437 40
1924	Hill, T. H	450 00
1924	Hillier, E. G	606 66
1921	Hodgson, G	705 00
1924	Hoey, Jas	506 66
1921	Hollins, J. M	712 80
*1923	Homer, F. W	11 69
1924	Hope, Geo. F	499 92
1924	Horner, F. B	447 96
1922	Houde, G	643 44
1924	Houle, Jos	283 92
1924	Houston, Geo	239 04
1924	Howard, E	320 04
1921	Howard, T. A	390 00
1924	Howe, Thos	1,140 00
1924	Howell, Thos	852 00
1924	Howson, Geo. H	565 92
1921	Hubbell, A. H	404 16
1924	Hubley, C. F	775 92
1924	Hudson, Chas	872 04
*1924	Hughes, J. W	330 11
1924	Hughes, Wm	474 24
1922	Humphries, T	1,380 00
1922	Hunt, B. J	914 28
1923	Hunt, Robert	305 16
1923	Hunter, Jas	821 88
1923	Hunter, S	494 28
*1924	Hurst, John	391 93
1921	Hutchins, R. F	459 72
1921	Hutchinson, H. H	666 60
1921	Hutton, H. W	319 44
*1921	Hynds, R. W	271 39
*1924	Imlah, J	55 64
1921	Ireland, C	195 36
1924	Jackson, F. N	726 00
1921	Jackson, S. J	451 92
1922	Jackson, W	173 94
1924	James, R. F	481 56
1924	Jamieson, Wm. A	735 48
1922	Jean, E	333 24
1922	Jeffcott, J. E	861 36
1921	Jeffrey, C	170 16
1923	Jenks, J. N	49 92
1924	Jenkins, Wm	973 56
1924	Johnson, I. S	540 00
*1921	Johnson, E. V	770 16
1921	Johnston, C. W	838 50
1924	Johnston, C. H. J	317 04
1924	Johnston, David	207 96
1924	Johnstone, H. W	900 00
1924	Johnston, Jane McI	300 00

Appendix No. 10—Continued

AMOUNTS paid as superannuation during the year ended March 31, 1929, to employees retired prior to March 31, 1928—*Continued*

Retired in	Name	Amount paid	Retired in	Name	Amount paid
	SUPERANNUATION No. 4	$ cts.		SUPERANNUATION No. 4	$ cts.
1923	Jones, A. E.	747 48	1923	Lefebvre, A.	100 20
*1924	Jones, C. H.	993 30	1924	Legendre, Mrs. L.	262 08
*1924	Jones, Thos.	50 14	1924	Lemieux, J. A.	615 12
1921	Jukes, H. A.	1,134 00	1924	Lemieux, J. N.	798 00
1924	Kealey, H.	270 00	1923	Lemieux, Z.	595 44
1923	Kealey, M. T.	452 57	1924	Lemire, J. N.	291 96
1924	Keays, E. M.	660 00	1924	Lenghen, C. G.	319 68
1922	Kelly, G. P.	302 40	1924	Leonard, J.	631 07
1921	Kemp, E.	963 00	1923	Lepage, C.	748 80
1924	Kennedy, Wm.	404 64	1922	Lewis, A.	249 96
1924	Kenney, J. J.	189 00	1924	Lewis, Lydia J.	738 72
1924	Kerr, J. W.	610 08	1923	Lewis, M.	364 92
1924	Kilduff, P. A.	480 00	1924	Liberge, F.	379 56
1921	King, G. C.	1,999 92	1921	Limoges, A.	644 16
1921	Kingsmill, E. A.	618 72	1922	Lindeburgh, A. V.	714 00
1924	Kingston, J. S.	493 32	1924	Linloff, E.	162 00
1921	Kinsman, R. W.	346 56	1921	Little, C.	725 88
1924	Kirk, J. T.	555 72	1924	Logan, D.	686 40
1924	Kirkwood, J. S.	1,107 48	1922	Long, W. H. A.	753 25
1924	Knox, Jos.	363 96	1924	Longley, T. W.	315 00
1924	Kuhlman, J.	613 32	1921	Loring, R. E.	1,098 24
1924	Kurs, Jos.	637 44	1921	Lortie, V.	456 84
1924	Kylie, Richard	451 92	1924	Low, E. J.	1,004 04
1924	Labelle, F.	180 00	1923	Lowery, J.	287 16
1924	Labelle, Jos. E.	288 00	1922	Loyer, E.	405 12
1924	Labine, G.	1,366 56	1924	Lundy, Thos.	464 76
1921	Labonté, L.	338 40	1924	Lunney, J. P.	656 88
1921	Lacombe, A.	432 48	1921	Lusher, Thos.	207 72
1924	Lacombe, L.	222 48	1921	Luttrell, Jos.	249 36
1924	Lacouture, L.	711 72	1924	Lyman, C. C.	525 00
1924	Lacroix, E. O. H.	767 40	1924	Macarow, M. E.	447 96
1924	Lacroix, S. C.	722 64	1921	MacDonald, G. M.	597 48
1924	Laflamme, V.	639 60	1921	MacDonald, J. B.	283 32
1924	Laforest, J.	786 60	1924	MacDonald, Jessie C.	515 52
1924	Lafortune, D.	589 68	1924	Macdonald, L. S.	496 56
1924	Lafrance, I.	394 20	*1921	MacDonald, W.	467 20
1924	Lagace, O.	169 20	1924	Macdonell, J. H.	253 44
1923	Lahaye, O.	614 28	1924	MacKay, Robt.	756 00
1924	Lake, Wm.	582 72	*1922	MacKenzie, A. B.	425 84
1924	Lally, F.	953 28	1924	Mackenzie, Jno.	499 92
1920	Lalonde, E.	162 72	1924	MacKey, W. H.	389 16
1921	Lalonde, L. N.	512 88	1924	Mackie, Robt.	420 00
1921	Lamarre, A.	248 52	1922	MacKintosh, C. H.	416 64
1924	Lamoureux, A.	428 40	*1921	MacLennan, F.	350 05
1924	Lamoureux, F.	140 88	1924	MacMillan, A. T.	397 08
1921	Langelier, F.	487 44	1921	MacMillan, J. H.	640 68
1924	Langevin, P.	670 80	1922	MacPherson, Duncan	1,319 16
1924	Lanteigne, G.	339 96	1921	MacRae, D. M.	317 40
1924	Lapierre, L.	94 44	1924	Magee, D.	115 72
1924	Laplante, J. B.	231 55	1923	Magee, W. D.	627 00
1924	Laprise, Jos.	609 84	1921	Maher, Jno.	177 96
1924	Larivée, H.	767 40	*1923	Mahood, Jas.	15 92
1924	Larivière, N.	453 24	1924	Mailleue, H. W. G.	647 50
1921	Laroque, J.	364 68	1924	Mair, Chas.	871 92
1924	Larose, W.	1,369 44	1924	Major, A.	345 24
*1923	Latendresse, M. A.	415 33	1924	Mallette, N.	125 04
*1924	Lavallee, J. B.	322 67	1923	Mallette, Nap.	407 52
1924	Lavictoire, E.	448 68	1924	Malouin, A.	675 00
*1921	Learmouth, A.	173 24	1924	Maloney, H. G.	400 80
1924	Lebano, M.	60 37	1924	Mann, G. G.	516 60
1924	Lebel, Chas. A.	840 00	*1922	Manson, D. A.	171 95
1923	LeBlanc, B.	429 96	1921	Marchant, W.	1,273 15
1921	Leblanc, J.	420 36	1923	Martial, H.	454 92
1920	LeBlanc, R.	553 32	1922	Martin, A.	691 56
1924	Leblanc, S.	471 24	1924	Martin, F. W.	847 00
1924	Leclair, P.	637 44	1922	Martin, I. E.	2,601 34
1924	Lederman, Agnes	526 68	1922	Martin, T. C.	270 00

Appendix No. 10—Continued

AMOUNTS paid as superannuation during the year ended March 31, 1929, to employees retired prior to March 31, 1928—*Continued*

Retired in	Name	Amount paid	Retired in	Name	Amount paid
	SUPERANNUATION No. 4	$ cts.		SUPERANNUATION No. 4	$ cts.
1922	Martin, W.	104 40	1921	Murray, W. H.	494 40
1924	Martineau, A. L. C.	563 33	1921	Murton, F. E.	559 91
1922	Martineau, M. J.	724 92	*1924	McCaffery, T. L.	258 57
1924	Mathe, N. M.	1,050 00	1924	McCaffrey, John	546 00
1921	Mathieu, P.	384 96	*1921	McCleister, Wm.	49 00
1923	Matthews, A. M.	238 32	1924	McClintock, Jos.	209 16
1924	Matthews, C. A.	935 00	1921	McClory, D.	618 96
1924	Matthews, P. H.	317 76	1921	McColl, A. C.	549 96
1924	Mayes, John	212 28	*1924	McColl, W.	15 85
1924	Meadows, Geo. A.	503 65	1922	McCombs, W. A.	262 68
1924	Meggs, A. E.	224 25	1924	McCoy, W. J.	762 96
1921	Mercer, E. N. H.	646 32	1924	McCullough, J. H.	207 96
1924	Mercier, J. B.	1,099 08	1924	McCully, G. A.	609 00
*1921	Merrick, H.	39 39	1924	McDonald, Flora J.	263 23
1923	Merrithew, J. N.	126 00	1924	McDonald, Jas.	382 32
1923	Merry, E.	518 76	1924	McDonald, M.	525 00
1924	Messenger, H. W.	574 92	1924	McDonald, Rev. M.	677 04
1922	Might, S. H.	702 00	1921	McDonnell, T.	307 20
1924	Migneault, A.	528 00	*1924	McDougall, A.	32 29
1924	Milette, Sara	546 00	1922	McDougall, Angus	141 24
1924	Millner, Geo. F.	682 56	1924	McEachern, G. B.	977 64
1923	Mills, N.	1,399 92	1924	McEwan, J.	758 40
1924	Mills, Wm.	554 40	1922	McEwan, P. H.	729 96
1924	Milne, G. L.	799 92	1923	McEwan, R. H.	232 92
1924	Milne, W. J.	1,181 64	1922	McGill, W.	560 64
1924	Milner, W. C.	1,119 96	1922	McGonnell, Peter	894 36
1923	Mitchell, G. H.	1,587 48	1924	McGovern, J.	715 27
*1924	Mitchell, G. L.	91 00	*1921	McGuire, T.	102 54
1924	Mitchell, J. A.	787 44	1923	McIvor, Isabella	339 95
1923	Mitchell, J. T.	540 00	1920	McKay, J.	811 08
1921	Mitchell, J. W.	544 44	1923	McKay, Jno.	506 40
1924	Mitchell, Robt.	1,019 66	1921	McKay, Robt.	785 76
1922	Mitchell, Wm.	205 08	1921	McKean, M.	728 16
*1921	Moberly, Frank	259 29	1924	McKenna, S.	266 64
1921	Moblo, Jno.	825 00	1924	McKenzie, A.	504 00
1924	Moeser, Wm.	615 96	1921	McKenzie, Jno.	406 92
1924	Moloney, A.	263 20	1921	McKenzie, R. S.	1,035 76
1924	Monahan, P.	571 78	1924	McLachlan, G. A.	1,110 78
1924	Monette, Adrien	627 00	1921	McLean, Donald	860 52
1924	Mongrain, E.	165 00	1924	McLean, W. J.	450 00
1924	Montgomery, A.	195 00	*1924	McLenhan, A.	397 90
1922	Mooney, M.	405 12	1921	McLennan, J. G.	495 00
1924	Moore, Robt.	207 96	1924	McLeod, J.	663 00
1921	Morel, E. L.	329 16	1924	McLeod, J. C.	740 96
1924	Moriarty, B.	195 00	1922	McLeod, W. McK.	639 96
1922	Morris, A. S.	904 20	1924	McNab, A. J.	522 00
1924	Morris, T. J.	435 72	1924	McNeil, J.	222 96
*1921	Morrish, T. H.	100 26	1923	McPhee, Jas.	198 24
1924	Morrison, A.	537 48	1924	McPherson, J.	969 72
1924	Morrison, A. J.	108 24	1924	McRae, A.	420 00
*1924	Morrison, Peter	258 62	1920	McRae, C. F.	316 80
1924	Morrison, W. J.	333 96	*1924	McRoberts, R. C.	236 76
1923	Morton, Thos.	780 00	1924	McShane, J.	110 40
1921	Mothersill, G. A.	1,762 44	1923	McTiernan, C.	306 46
1924	Mowat, W. J.	647 04	1921	Nesbit, Geo.	200 52
1922	Muhlig, G. E.	662 40	1924	Nesbitt, G. McQ.	317 76
1924	Mulligan, A.	764 52	1921	Nettle, F. J.	437 40
1924	Mullin, J.	274 32	*1922	Neville, James	123 48
1924	Mulroney, J. T.	568 32	1921	Nevins, F.	530 40
1924	Mumford, L. S.	265 80	1924	Nevins, J.	780 36
1924	Munn, A.	1,668 24	1924	Nevins, Jos.	450 00
1924	Munroe, J. J.	374 28	1923	Newcombe, H.	991 56
1924	Murdock, P. C.	518 76	1921	Newling, H. P.	619 80
1924	Murphy, C.	517 68	1924	Nezan, L.	360 24
1924	Murphy, J. A.	498 36	1924	Nichol, S.	161 28
1924	Murphy, M. A.	473 28	*1924	Nicholson, T.	256 01
1924	Murray, J. B.	230 00	1924	Nicol, J.	508 08

Appendix No. 10—Continued

AMOUNTS paid as superannuation during the year ended March 31, 1929, to employees retired prior to March 31, 1928—*Continued*

Retired in	Name	Amount paid	Retired in	Name	Amount paid
	SUPERANNUATION No. 4	$ cts.		SUPERANNUATION No. 4	$ cts
*1924	Nisbet, W.	161 85	1924	Plouffe, N.	214 44
1924	Noonan, H. T.	672 00	1924	Poirier, M. O.	1,125 00
1922	Noonan, M. W.	898 32	1924	Polley, W. H.	371 52
*1921	Northwood, K.	126 19	1922	Pollock, R.	522 96
1923	Normand, N. M.	225 48	1924	Pope, E.	1,350 00
1924	O'Brien, C. F. G.	559 92	1924	Porteous, G. H.	496 20
1923	O'Brien, D.	954 48	1922	Potter, Hy.	466 56
1924	O'Brien, J.	384 24	1921	Potter, W.	579 84
1922	O'Brien, J. C.	549 60	1922	Poulin, J.	657 60
1924	O'Brien, M.	780 00	*1924	Pouliot, J. P.	347 14
1923	O'Brien, W.	501 60	1924	Preston, S. R.	333 24
1921	O'Connor, G.	549 96	1924	Prevost, J.	443 76
1922	O'Connor, K. M.	815 16	1920	Prevost, J. E. W.	629 52
*1923	O'Flaherty, M. J.	677 82	1924	Prince, E. E.	1,999 92
1923	Ogburn, R. J.	396 00	1921	Probert, C. H.	294 60
*1924	Ogilvie, J.	838 39	1924	Proulx, J.	161 04
1924	O'Hanly, M.	1,045 00	1924	Proulx, N.	447 96
1920	O'Leary, D.	1,425 00	1921	Pruneau, A.	263 40
1921	Oliver, E. C.	709 96	1921	Pye, J. R.	600 00
1924	O'Meara, M. T.	233 28	1924	Quesnel, A.	643 32
1924	O'Reilly, E.	400 80	1924	Quinn, W. A.	306 96
1923	O'Reilly, M.	285 72	*1923	Ralph, W. B.	131 94
1924	Orr, S.	165 72	1924	Ralston, B. W.	882 00
1924	Osborne, J. L.	321 98	1924	Raper, E. W.	928 68
1924	Osborne, N. P.	342 48	1924	Rathbone, C. F. A.	246 96
1921	Owen, N. C.	682 32	1924	Ray, G. H.	157 85
1921	Page, W.	269 40	1924	Ray, J. E.	1,989 72
1921	Palmer, S. A.	331 56	1924	Raymond, M. L.	360 00
1924	Papillon, U.	234 63	1921	Raymond, W. G.	1,075 08
1923	Papineau, G. B.	635 00	1924	Read, G.	941 64
1923	Papineau, L. G.	1,710 00	1924	Redhead, J. W.	234 96
1924	Paquet, J. B.	271 92	*1921	Redmond, A.	87 30
1921	Paquet, F. X.	1,409 16	1924	Regimbal, A.	1,403 28
1924	Paradis, E.	420 00	1924	Remillard, L.	432 00
1924	Paris, Z.	674 52	1924	Richardson, A. K.	615 96
1922	Parker, Thos.	652 59	1921	Richer, A. M.	395 52
1921	Parkin, T. M.	417 84	1924	Rickey, J. A.	561 94
1922	Parrington, Jas.	882 84	1922	Riendieu, Arsene	936 00
1924	Pasmore, C. J.	483 00	1924	Riendieu, Avila	841 92
1924	Patchell, W. A.	1,732 44	1921	Riley, T. J.	570 35
1924	Patching, R.	960 00	1924	Ringrose, J.	117 24
1924	Patenaude, J.	307 92	1924	Rivers, C. A.	463 56
1924	Patterson, C. C.	1,063 92	1924	Rivoire, J. D.	181 08
1921	Pattie, R. P.	297 84	1922	Roberts, J. W. G.	862 44
1924	Pawling, J.	556 08	1921	Roberts, T.	900 00
1922	Payne, F. F.	1,255 32	*1922	Robertson, H. H.	467 50
1921	Payne, J. L.	1,993 68	1922	Robertson, J. J. B.	882 84
1924	Pearce, E. J.	1,144 92	1924	Robertson, R. J.	881 64
1924	Pelletier, J. B.	378 84	1924	Robertson, W. A.	1,112 40
1924	Pelletier, R.	773 04	1924	Robertson, W. B.	924 47
1924	Peloquin, J.	425 52	1921	Robertson, W. R.	715 08
1924	Pennington, W.	912 92	1923	Robitaille, S.	649 92
1924	Percival, T. M.	600 00	1924	Roche, C. P.	1,023 75
1924	Perkins, S. C.	741 00	1924	Rochette, P.	444 00
1922	Perreault, E. E.	774 00	1924	Rodman, E. A.	633 75
*1922	Perry, F. C.	513 69	1922	Roe, Lottie	405 12
1921	Peters, J. N.	342 43	1921	Rogers, C. G.	1,026 00
1924	Peters, W. H.	427 44	1921	Rogers, F.	322 83
1922	Phibbs, C. J.	315 00	1924	Rombough, J. I.	874 92
1921	Phillips, J. I.	280 20	1923	Rose, D. J.	328 80
*1923	Philips, T. H.	66 21	1924	Ross, A. H.	314 16
1924	Phoenix, A. J.	527 76	1924	Ross, C.	826 56
1924	Pickard, N.	198 00	1923	Ross, W.	116 52
1924	Pickins, J. M.	87 00	1924	Routh, E.	266 64
1921	Pigeon, H. H.	559 92	*1921	Routhier, A. M.	259 37
1924	Pinkerton, Robt.	236 16	1922	Rowe, W.	476 08
1924	Plouffe, A.	232 31	1924	Roy, A. J.	899 64

Appendix No. 10—Continued

AMOUNTS paid as superannuation during the year ended March 31, 1929, to employees retired prior to March 31, 1928—*Continued*

Retired in	Name	Amount paid	Retired in	Name	Amount paid
	SUPERANNUATION No. 4	$ cts.		SUPERANNUATION No. 4	$ cts.
1924	Roy, J. A.	729 72	1921	Steadworthy, Wm.	1,076 16
1923	Roy, M. F.	580 68	1920	Stephens, J. P.	731 76
1924	Roy, M. L.	498 24	1921	Stevens., A.	643 68
1924	Ruest, E.	125 52	1921	Stewart, E.	307 92
1924	Runions, A.	405 48	1922	Ste-Marie, Jos.	882 84
1921	Russell, G. J. T.	333 24	1924	St-Marseille, A.	92 20
1924	Russell, J. W.	300 00	1923	St-Maurice, A.	99 00
1924	Russell, Robert.	636 00	1924	Stewart, J. B.	1,014 96
1924	Ryan, J.	842 04	1924	Stewart, L. J. G.	665 16
1922	Rykart, J. C.	600 00	1924	Stingue, J.	495 72
*1924	Sales, Wm.	199 98	1921	Stockdale, R. F.	269 16
1923	Salkus, Albert.	425 28	1924	Stroulger, G. F.	933 36
1924	Salton, W. H.	498 72	1924	Stuart, S. G.	390 96
1921	Sanagan, F. L.	247 17	1921	Suffern, A.	384 00
1922	Saunders, C. E.	1,128 88	1924	Sullivan, D.	473 85
1924	Sauvageau, S.	782 04	1923	Sullivan, J.	534 84
1923	Sauve, Jos.	239 76	1924	Sullivan, W. H.	3,150 00
1924	Savard, H.	226 80	1921	Summers, A.	653 88
1924	Savard, J. B.	482 12	1924	Sumner, F. E.	514 44
1921	Savard, J. J.	361 44	1924	Surtees, W. S.	1,050 00
1924	Schuler, W. B.	630 48	1922	Suter, J.	145 80
1924	Scott, J.	202 92	1921	Sutherland, J. A.	450 00
1924	Scott, M. M.	630 00	1924	Sutton, L. L.	649 92
1924	Sedgwick, J.	410 76	1921	Swindell, R.	279 11
*1921	Seeber, E.	5 55	1921	Sword, Jas.	204 24
1921	Seguin, D.	609 00	1921	Taggart, Jas.	540 48
1924	Seguin, V.	253 56	*1921	Talbot, Jno.	28 87
1924	Selby, W. D.	900 00	*1924	Tamblyn, J. F.	347 96
1924	Selwyn, P. H.	1,312 44	1924	Taunton, W. D.	400 80
1924	Semple, M. L.	625 57	1924	Taylor, G. J.	615 96
1923	Shanahan, C.	459 12	1924	Taylor, J. G.	739 56
1921	Sharp, A.	885 24	1924	Taylor, Jno.	624 24
1924	Sharpe, J.	679 92	1924	Taylor, J. R.	693 72
1921	Shea, C.	360 96	1921	Taylor, N. H.	569 88
1924	Shehyn, A. R.	951 96	1924	Taylor, T. G.	1,398 83
1923	Shera, W. G.	270 00	1921	Telford, D. M.	889 68
1924	Sherk, D.	476 04	1922	Tétrault, F. X.	280 44
1924	Shultis, G. T.	104 40	1921	Tétu, A.	702 48
1921	Sidney, A. P.	212 52	1924	Thibault, Jos.	336 00
1924	Simard, S.	418 68	1921	Thibert, N.	349 08
1924	Simpson, F.	415 92	1924	Thom, H.	528 48
1922	Simpson, H. V.	369 96	1923	Thomas, F. R.	934 44
1921	Simpson, J. S.	622 29	*1921	Thompson, John.	60 94
1924	Simpson, P. E.	262 44	1922	Thompson, J. T.	270 36
1924	Sinclair J. W.	467 40	1924	Thompson, W. G.	720 00
1924	Sixsmith, B. F.	890 88	1924	Thomson, A.	407 28
1921	Slater, M. A.	647 88	1921	Thrush, Jno.	412 92
1924	Sloan, J. B.	195 00	1924	Tison, R. A.	775 44
1924	Sloan, W.	633 33	*1924	Toale, J.	209 76
1921	Smith, A. H.	757 32	1924	Todd, R.	86 88
1922	Smith, B. R.	50 00	1921	Tolson, F. G.	507 48
1924	Smith, J.	1,500 00	1924	Topham, F.	549 36
1922	Smith, Jno.	861 72	1921	Towill, J.	231 00
1923	Smith, Jno. F.	401 40	1924	Tramner, E. G.	759 72
*1924	Smith, Jos.	139 90	1924	Tranter, K.	450 00
1922	Smith, J. C.	678 00	1924	Travis, C. A.	651 24
1924	Smith, J. Obed.	3,141 66	1924	Tremblay, F.	197 16
1921	Smith, W.	1,054 92	1921	Tremblay, J. A.	1,146 48
*1922	Smith, Wm.	168 61	1924	Tremblay, O.	540 84
1921	Smithers, R. O.	461 16	1922	Tremblay, P.	453 12
1922	Snetsinger, J. S.	499 20	1922	Trépanier, L. A.	908 52
*1922	Snetsinger, R.	255 53	*1921	Trevor, A.	11 56
1924	Songhurst, J. R.	317 04	1924	Trodden, James.	420 16
1924	Southcott, S. J.	629 76	1924	Trudeau, A.	530 04
1924	Stafford, J. P.	900 00	1924	Trudel, E.	1,183 32
1924	Stalker, M.	606 00	1921	Turner, Geo.	500 00
1921	Stanley, E.	795 84	1924	Tuura, A.	307 68

Appendix No. 10—Continued

AMOUNTS paid as superannuation during the year ended March 31, 1929, to employees retired prior to March 31, 1928—*Continued*

Retired in	Name	Amount paid
	SUPERANNUATION No. 4	$ cts.
1923	Upper, J.	383 52
1924	Valiquet, U.	2,215 00
1922	Valpy, J. T.	199 20
1924	Vanasse, A. P.	348 00
1924	Vanasse, F.	1,219 44
1924	Vaughan, T.	283 20
1924	Vermette, T.	390 00
1924	Vert, A. E.	500 00
1924	Vicars, J. R.	1,020 60
1924	Vigneault, P. E.	750 00
1924	Vincent, G. E.	450 00
1924	Voligny, L. R.	1,740 00
1924	Vrooman, N.B.	1,140 00
1922	Wagner, L.	101 64
1924	Waine, F. E.	543 24
1924	Wainwright, P. H.	613 32
1923	Wainwright, R.	752 88
*1924	Walker, E.	8 75
1924	Walker, G.	699 22
1924	Walker, H. L.	598 44
1922	Walker, J.	432 24
1924	Walker, J. A.	280 08
1921	Walker, W. H.	480 00
1924	Wallace, J. M.	541 32
1922	Wallace, T. F.	144 62
1924	Walsh, E.	346 08
1922	Walsh, Thos.	416 88
1922	Walsh, W.	750 00
1922	Walters, H.	841 62
1924	Ward, A. E.	705 36
*1922	Warren, G. S.	353 84
1922	Waterbury, D. H.	1,303 32
1924	Waters, J.	160 08
1924	Watson, Geo. A.	262 68
1924	Watterworth, E.	252 00
1924	Weasner, J.	235 32
1922	Weaver, Jas. A.	83 49
1923	Webber, B. C.	1,883 28
1922	Webster, C. E.	374 40
1922	Webster, Geo.	207 12
1924	Weese, J. W.	219 12
1924	Werry, F. W. O.	693 24
1922	West, H.	422 76
1924	West, T.	821 76
1922	Weston, W. H.	429 00
1924	Wetmore, G. K.	396 00
1922	Whalen, W. H.	416 99
1922	Whare, A.	275 33
1922	Wheatley, G. H.	1,125 00
1924	Wheeler, A. O.	733 32
1923	White, D.	186 96
1922	White, E. P. M.	716 04
1922	White, G. A.	879 24
1923	White, J. B.	540 00
1924	White, W. J.	2,250 00
1923	Whitty, M. J.	534 96
1923	Williams, H. A. C.	351 00
1922	Williams, J. T. C.	987 96
1924	Williams, W.	235 92
1924	Wilson, A. H.	391 92
1924	Wilson, G.	275 16
1924	Wilson, H. A.	664 56
1924	Wilson, J. A.	737 40
1924	Wilson, J. L.	234 35
1924	Winchester, L.	605 04
1924	Withrow, J. F. D.	1,008 00
1922	Wolfenden, Wm.	762 48
1924	Woodill, J. S.	845 40
1922	Wright, E.	481 44
1924	Wright, L. K.	541 56
1921	Wurtele, S. T.	454 92
1923	Yeomans, E. H.	873 96
1921	Yeomans, L. B.	440 36
1923	Young, B. R.	87 24
1921	Young, U.	501 60
1924	Young, P. P.	525 00
1924	Zinkan, G. V.	1,244 40
		671,611 42
	SUPERANNUATION No. 5	
	Civil Service Superannuation Act, 1924, Chap. 24, R.S. 1927	
	Annuities to Contributors	
1928	Adamson, S.	567 60
1925	Alkins, W.	204 00
1926	Allen, F. G.	1,327 56
1925	Allen, G. H.	1,050 00
1925	Alton, S. E.	203 16
1928	Anderson, D.	307 20
1928	Andrews, E. L.	428 40
1926	Andrews, G. P.	1,176 00
1926	Arcand, A. A.	693 96
1928	Armstrong, E. W. H.	1,399 92
1926	Back, M. J.	476 64
1926	Baillarge, E. S.	576 72
1928	Baldwin, W. C.	352 44
*1926	Banville, J.	466 00
1926	Barbe, W.	1,596 00
1928	Barnes, T. H.	367 32
1928	Bartle, J. C.	2,533 92
1924	Beaulieu, R.	1,235 52
1928	Bédard, C.	443 30
1926	Béland, T.	792 00
1926	Belding, H. W.	1,119 96
1925	Belec, J.	349 68
1927	Belleau, A. E.	2,310 00
1928	Bent, F. P.	1,583 73
1928	Bishop, H. F.	950 76
1925	Boak, W. C.	1,131 24
1926	Boivin, D.	890 40
*1926	Bolduc, L. N.	780 50
1928	Bourbonnière, E.	506 76
1924	Bourque, E.	390 17
1928	Bowles, H. W.	311 64
1926	Bray, J. L.	408 36
1928	Brears, J. S.	730 15
1926	Brochu, J. W. L.	701 64
1926	Brough, W. C.	1,823 28
1925	Brown, E. M.	392 88
1926	Brown, J. H.	615 24
1925	Brown, T. L.	521 16
1926	Bruce, D. A.	3,118 44
1928	Burgess, W. H.	300 24
1925	Burns, W. P.	992 42
1925	Cameron, W. M.	1,092 24
1926	Campbell, A. C.	2,863 92
1928	Campbell, D. D.	2,102 28
1925	Canniff, W. H.	1,575 00
1925	Chambers, C.	511 56
1926	Chartrand, J. A.	458 96

Appendix No. 10—Continued

AMOUNTS paid as superannuation during the year ended March 31, 1929, to employees retired prior to March 31, 1928—*Continued*

Retired in	Name	Amount paid	Retired in	Name	Amount paid
	SUPERANNUATION No. 5	$ cts.		SUPERANNUATION No. 5	$ cts.
	Annuities to Contributors			*Annuities to Contributors*	
1926	Cheney, W. H.	895 07	1926	Giroux, F. X.	983 40
1927	Church, I. D.	254 02	1925	Giroux, T. A.	1,260 00
1928	Clark, G. A.	1,063 32	1928	Glover, W. J.	3,990 00
1926	Cliff, W. W.	448 92	1928	Godfrey, E. H.	1,490 16
1926	Cloakey, G. H.	518 04	1926	Goetz, G.	466 56
1925	Connolly, E.	1,470 00	1926	Gordon, A. H.	1,076 79
1926	Coombs, J. S.	504 60	1926	Gordon, T. A.	196 56
1928	Copp, J. R.	1,186 44	1925	Greenfield, R.	1,959 96
*1927	Cory, T.	770 94	1928	Greer, Jas.	1,649 64
1928	Costigan, T.	960 48	1925	Grenier, A.	1,304 28
1926	Craig, S.	406 44	1926	Grove, J.	588 60
1928	Croucher, R. A.	247 92	1925	Guay, L. M.	502 20
1926	Cuming, E. E.	433 81	1926	Guillemette, J. E.	1,308 96
1926	D'Aoust, I.	208 92	1925	Guppy, H. J.	1,470 00
1926	Davis, J. H.	711 72	1925	Hall, N. E.	1,132 80
1927	Davy, R. A.	954 72	1925	Hancock, W.	927 48
1928	Day, J. B.	565 80	1925	Hannan, W. H.	242 64
1928	Deacon, F. L.	734 56	1925	Harding, S.	916 44
1928	Decary, F.	221 76	*1925	Harney, W. T.	326 64
1927	DeCotret, L. D. R. A.	1,605 24	*1928	Harris, W. F.	53 20
*1927	Depocas, E.	205 55	1925	Hartley, H.	633 60
1928	De Salaberry, R.	983 76	1928	Hartley, R.	1,011 12
*1927	Despard, A. W.	128 19	1925	Hatch, W.	1,596 00
1926	Devlin, C. A.	1,091 16	1928	Hawkins, J. R.	310 80
1926	De Young, G. H.	965 52	1925	Hegan, J. B.	1,560 00
*1925	Dionne, J. L. A.	28 86	*1927	Henley, W. C.	35 69
1925	Dixon, C.	493 08	1925	Henry, M.	231 00
1925	Dixon, J. G.	594 96	1926	Hetherington, H. A.	306 00
1925	Doherty, T. K.	2,319 96	1926	Hill, A.	295 92
1925	Dorion, G.	582 72	1928	Holbrook, J. A.	396 48
1928	Dorland, P. N.	582 62	*1927	Hynes, M. E.	1,344 00
1926	Doucet, R.	928 20	1928	Jarvis, C. D.	456 48
1927	Dowling, E. W.	569 16	1928	Jenkins, T.	1,177 08
1928	Dowrie, D. C.	1,176 00	*1928	Joss, D.	188 56
1928	Duchesnes, N.	416 52	1928	Joubert, A. A.	351 36
1926	Duncan, T.	2,520 00	1925	Kahala, J. J.	1,379 28
1925	Dunlevie, S. A.	1,600 56	1926	Kane, W. J.	1,490 40
1928	Dupuis, E.	495 32	1927	Keating, J. P.	1,208 64
1926	Dussault, J. B.	1,081 44	*1927	Keeler, R. M.	134 16
1926	Dwyer, M. J.	592 32	1925	Kemeys-Tynte, A. P. M.	1,082 64
*1925	Eagleson, J. S.	168 00	1926	Kidner, E.	998 16
1928	Edwards, J. P.	831 48	1925	Kinsman, M. B.	436 08
1925	Elliott, R. J.	948 48	*1928	Kirkpatrick, R. A.	314 30
1925	Everett, E. G.	1,253 64	1928	Kniewasser, A.	594 67
*1924	Fagan, M. H.	209 60	1928	Laberge, P.	405 15
1925	Fair, J. J.	1,386 00	1928	Labonté, L.	1,176 00
1928	Fairley, W. H.	454 20	1928	L'Africain, N.	1,304 04
1928	Fairweather, J. H.	2,541 00	1928	Laidlaw, J. W.	355 32
1926	Fielding, C. W. W.	1,333 44	1925	Lamanque, T.	1,092 00
1926	Filgiano, H. E. J.	1,134 00	1926	Lamb, J.	208 08
1925	Fitzgibbon, J. D.	2,142 00	*1926	Lamb, W.	904 75
*1927	Flanagan, P.	79 45	1924	Landriau, F. E.	1,276 32
1928	Flynn, E.	390 24	1927	Laporte, J.	585 12
1926	Foley, P.	1,088 16	1928	Larue, C. H.	475 08
1926	Fowler, E. M.	280 80	1926	Laschinger, A. G.	377 88
1924	Fraser, B. H.	3,780 00	1928	Leake, W. W.	1,032 24
1928	Fraser, M.	991 92	1925	Learoyd, E. L.	1,470 00
1928	Fraser, P. T.	1,040 88	1926	Lesage, L. A.	2,016 00
1928	Gagnon, Moise	1,000 32	1928	Lindsay, R. W.	1,114 32
1928	Garrioch, J.	306 72	1928	Lock, H.	628 42
*1925	Gaskin, Thos.	360 36	1928	Logan, R. J.	317 04
1926	Gauthier, A.	1,308 96	1928	Lorange, O.	1,614 60
1927	Geldart, O. A.	1,627 44	1925	Lortie, A.	1,102 44
1925	Gillmore, M. M.	491 64	1928	Lounds, C. M. R.	1,357 92
1926	Girard, P.	707 04	1926	Low, J. G. M.	777 24

Appendix No. 10—Continued

AMOUNTS paid as superannuation during the year ended March 31, 1929, to employees retired prior to March 31, 1928—*Continued*

Retired in	Name	Amount paid	Retired in	Name	Amount paid
	SUPERANNUATION No. 5 *Annuities to Contributors*	$ cts.		SUPERANNUATION No. 5 *Annuities to Contributors*	$ cts.
1927	Low, P. V.	1,119 96	1925	Ostiguy, L. R.	910 32
1925	Lynch, W. J.	2,772 00	1928	Parker, A.	1,617 00
1928	Lytle, S. B.	1,275 48	1926	Parmelee, J. D.	2,520 00
1928	Macdonald, C. A.	682 44	1925	Patterson, W. L.	1,042 92
1926	Macdonald, D. J.	1,119 96	1926	Pattison, T. F.	1,139 16
1925	Macdonald, W.	601 92	1925	Payne, A. N.	2,169 96
1927	Macdougall, J. I.	310 56	1926	Peake, T. B.	1,459 20
1928	MacKellar, D.	191 04	1926	Pearson, S. M.	421 08
1925	Mackenzie, S. M.	496 08	1925	Pelletier, L. M.	1,219 80
1928	Maclachlan, J. M.	1,780 44	*1925	Pelletier, P.	493 88
1928	Madill, T.	201 72	1928	Perrin, C. N.	1,186 44
1926	Magee, C. W.	882 00	1928	Phair, L. B. C.	1,483 69
1928	Marineau, P. O.	1,998 12	*1926	Poulin, C. E.	282 78
1928	Marquette, E. J. M.	303 36	1926	Preston, J. H.	521 95
*1925	Martin, A.	737 80	1925	Reed, C. C.	1,287 96
1925	Mathers, I. H.	1,188 24	1926	Reiffenstein, J. H.	1,959 96
1925	Mathieu, J. O.	922 32	1926	Rennie, E. H.	1,224 96
1928	Meadows, A. H.	1,186 44	1925	Richard, L. N.	1,470 00
1926	Miller, R. R.	499 56	1925	Richardson, W. H.	1,227 24
1928	Mitchell, A.	1,177 08	1925	Ring, J. W.	1,302 00
1928	Moffett, D.	375 00	1928	Rioux, J. B.	376 92
1926	Montgomery, J. D.	324 00	1926	Ritchie, J. H.	1,327 56
1926	Montreuil, A. T.	1,857 60	1926	Robert, O. P.	230 04
1928	Moore, S. J.	1,377 61	1928	Roberts, L. H.	1,186 44
1928	Morrison, J. A.	427 92	1928	Robertson, A. B.	470 57
1926	Mouck, A. E.	381 24	1925	Robertson, A. R.	1,115 16
1928	Moyer, P. J.	318 72	1928	Robineau, F.	564 60
1928	Mullan, J.	558 36	1926	Robinson, F. P.	543 12
1928	Murray, J. A. F.	591 36	1925	Rolston, E.	934 44
1927	Murray, J. P.	618 72	1928	Rowan, W. E.	817 56
1928	Murray, M.	166 32	1925	Roy, F. A.	303 05
1928	Myrick, J.	1,171 92	1928	Sanders, E. L.	2,528 28
1925	McAllan, W. J.	524 52	1928	Saunders, G. H.	472 92
1926	McCarey, Jos.	1,932 00	1927	Sauriol, A.	1,596 00
1928	McCharles, J.	1,950 36	1927	Scott, J. C.	1,806 00
1925	McCreery, T. D.	282 00	1928	Scullion, W. J.	1,440 00
1926	McCullough, W. S.	233 52	1928	Selleck, E. J.	338 88
1925	McDonald, M.	1,596 00	1926	Sheppard, N. B.	2,016 00
1926	McDougall, Alex.	418 73	1928	Sims, T. C.	580 56
1928	McDougall, Allan.	543 90	1925	Sinclair, C. McL.	1,140 96
1928	McElroy, P. J.	1,370 88	1928	Skinner, W. H.	2,123 28
1927	McGillivray, H.	1,470 00	1926	Sladen, A. F.	4,200 00
1926	McGrath, M. J. T.	367 44	1928	Smith, Frank.	732 68
1925	McInerney, L.	1,071 00	1925	Smith, H. I.	1,318 32
1928	McIntosh, D.	148 20	1926	Smith, J.	1,061 40
1926	McKendrick, D.	2,071 92	1928	Smith, John.	227 40
1926	McKenzie, H. D. L.	263 16	1926	Smith, J. H.	94 16
*1926	McLaughlin, H.	1,543 50	*1926	Smith, R. R.	1,103 63
1928	McLennan, J.	329 52	1926	Sole, F. W.	328 68
1925	McMinn, J. D.	218 88	1926	Sparks, W.	2,016 00
1928	McMullin, A.	1,186 44	1926	Staniforth, C. G.	371 93
1925	McNeely, J.	1,428 00	1928	Stanley, A. T.	147 12
1925	McPherson, H. B.	482 28	1926	Stephens, A.	216 24
1926	Nash, A. F.	1,197 36	1928	Stevens, C.	384 00
1926	Neads, M. E.	502 68	1925	Stewart, E. E.	396 60
1928	Nearing, J.	643 24	1928	Stewart, F. D.	1,229 40
1927	Neelin, F. G.	1,024 92	1928	Stewart, Jas.	217 08
1925	Niven, T. D.	570 57	1928	Stewart, Jas.	1,216 56
1926	Norman, H. F.	584 74	1928	Stewart, J. D.	969 00
1927	Northrup, W. T.	222 48	1924	St-Germain, Mabel.	573 84
1928	Nuttall, G. A.	339 96	1928	Sutton, E. W.	1,307 76
1926	Oakes, J.	544 08	1927	Swait, C. E.	1,090 92
1925	O'Brien, J.	1,147 92	1928	Thivierge, J. A.	1,326 12
1927	O'Flaherty, E.	769 43	1926	Thomas, C. E.	813 48
1928	O'Halloran, G. F.	3,774 60	1928	Thompson, T. H.	294 60

Appendix No. 10—Continued

AMOUNTS paid as superannuation during the year ended March 31, 1929, to employees retired prior to March 31, 1928—*Continued*

Retired in	Name	Amount paid
	SUPERANNUATION No. 5	$ cts.
	Annuities to Contributors	
1928	Thorp, G. J.	677 16
1926	Todd, A. H.	2,812 80
*1927	Traversy, F. X.	265 20
1928	Traynor, S. M.	2,546 25
1927	Troup, W. E.	366 96
1926	Turner, J. E.	493 56
1926	Uniacke, R. F.	1,738 20
1928	Valentine, C.	583 56
1926	Valiquette, J.	1,224 96
1928	Van Loon, W. C.	642 84
1928	Wade, A. R.	2,016 00
1926	Waggoner, S. H.	1,452 48
1926	Walton, G.	831 60
1928	Warren, M.	627 22
1926	Watson, A.	561 48
1925	Watt, G.	825 84
1925	Wenden, G. S.	413 28
1925	Wetmore, T. H.	271 80
1925	White, J.	310 80
1928	White, Mary	387 48
1926	White, W. R.	882 00
*1927	Wilson, A. E.	112 77
1925	Wilson, A. V.	414 72
1928	Wilson, W. F.	4,072 80
1925	Wiseman, J.	772 44
1928	Wodehouse, W. T.	586 08
*1928	Woodrow, R. D.	266 76
1925	Wright, C. F.	296 52
*1926	Wright, R. J.	687 72
1925	Wyatt, W. G.	408 00
1926	Wyld, G.	1,350 12
1927	York, B. L.	2,948 04
		319,774 87
Died in	*Annuities to dependents of deceased employees*	
1928	Abraham, R. H.	456 12
1928	Adam, A. R.	480 48
1927	Adam, J. W.	233 52
1926	Alton, G. W.	186 00
1927	Anderson, B.	305 28
1926	Armstrong, T. B.	275 65
1926	Audet, J. P. A.	113 76
1928	Avard, W.	258 96
1928	Bainbridge, C. H.	144 12
1925	Baird, T. M.	135 08
1925	Barthe, R.	604 76
1926	Bartlett, H. J.	207 00
1926	Bastedo, S. T.	799 20
1928	Beausoleil, J. P.	304 08
1928	Bell, H. L.	96 48
1926	Bennett, J.	61 93
1926	Benoit, L. V.	587 52
1926	Bernier, P. E.	573 96
1928	Blake, A. A.	176 28
1926	Bleakney, A. C.	516 24
1929	Bolduc, L. H.	80 64
1928	Bousfield, C.	249 24
1926	Bowes, L. T.	330 36
1926	Brittingham, F. A.	165 75
1926	Briand, J. M.	601 68
1928	Brophy, A.	1,499 52
1928	Brown, J. C.	117 35

Died in	Name	Amount paid
	SUPERANNUATION No. 5	
	Annuities to dependents of deceased employees	
1926	Bruce, R.	222 36
1926	Brunelle, H.	216 12
1928	Buckley, T. J.	441 72
1928	Burke, R. J.	277 32
1928	Burns, L.	214 32
1928	Butler, D. J.	381 20
1928	Butler, T.	326 88
1925	Campbell, H. S.	525 00
1925	Carey, P.	582 36
1927	Carlin, I.	117 48
1926	Carroll, J. F.	417 84
1926	Carruthers, F. C.	476 88
1927	Carter, B.	273 36
1925	Chambers, E. J.	940 56
1926	Charlton, W.	152 88
1926	Chevrier, F. L.	884 04
1928	Connor, G. K.	186 84
1925	Copeland, R. E.	185 88
1928	Corriveau, A. F. J.	337 20
1928	Cory, T.	129 87
1928	Côté, L.	692 64
1928	Covey, A.	123 64
1928	Cowling, A. J.	227 52
1928	D'Aigle, D. I.	369 72
1928	Dares, H. B.	351 03
*1925	Davies, T. E. S.	355 41
1928	Davies, W. B.	538 68
1926	Dawson, H. J.	1,103 40
1925	Dennis, J. A.	458 12
1928	Depocas, E.	161 09
1928	Despard, A. W.	618 16
*1924	Deville, E. G. D.	891 48
1928	Dionne, J. L. A.	259 68
1926	Dixon, J.	212 16
1925	Dorsey, J. J.	624 84
1928	D'Orsonnens, A.	531 60
1926	Dowd, E. C.	284 64
1925	Dowling, D. B.	583 92
1926	Doyle, D. J.	478 92
1927	Drysdale, W.	448 80
1928	Dubuc, J. P. E.	178 80
1925	Duck, A. R. B.	94 32
1928	Eagleson, J. S.	504 00
1926	Edge, V. J.	773 60
1928	Egglefield, L.	258 84
1925	Elliott, F.	64 68
1925	Evans, P. H.	208 17
1926	Fafard, O. V.	918 72
1928	Fagan, M. H.	272 14
1928	Farnworth, F. H.	236 28
1925	Fawcett, E. L.	362 18
1925	Featherston, J. E.	1,027 68
1926	Fee, R.	213 24
1928	Filson, H. K.	199 54
1928	Fink, G. L.	130 14
1925	Finlayson, R.	547 08
1926	Fiset, A.	154 56
1925	Fisher, W. D.	228 47
1928	Fixter, J.	894 24
1927	Flaglor, J. S.	557 28
1924	Flannery, P. J.	535 56
1926	Forbes, J.	69 84
1928	Force, E. A.	465 60
1926	Fraser, D.	420 60

Appendix No. 10—Continued

AMOUNTS paid as superannuation during the year ended March 31, 1929 to employees retired prior to March 31, 1928—*Continued*

Died in	Name	Amount paid	Died in	Name	Amount paid
	SUPERANNUATION No. 5	$ cts.		SUPERANNUATION No. 5	$ cts.
	Annuities to dependents of deceased employees			*Annuities to dependents of deceased employees*	
1928	Fraser, F. R.	332 77	1929	Lamb, W.	39 65
1928	Fraser, S.	184 20	1924	Lang, J. T. C.	264 37
1926	Frost, J. A.	283 92	1926	Langevin, E. V.	257 76
1926	Gamache, J. M.	690 36	1926	Lapointe, J. A.	167 64
1928	Gaskin, Thos.	285 28	1928	Laprise, E.	57 72
1926	Gaudin, T.	210 36	1925	Larkin, J. M.	689 84
1925	Gauthier, G. H.	305 88	1927	Larue, J. N.	441 00
1925	Genest, O. A.	255 84	1925	Larue, J. L. H.	525 00
1926	Genest, P. F. X.	648 48	1926	Latour, J. L.	390 36
1925	George, A. F.	364 96	1925	Learn, A. J.	208 20
1926	Gerald, C.	469 58	1926	Lecourt, C. E.	615 24
1927	Gillspie, D.	352 80	1925	Lelièvre, S.	808 44
1928	Gillis, A. D.	167 88	1926	Lemieux, F. X.	367 44
1928	Good, Joseph	318 36	1926	Lipsett, W. S.	315 00
1928	Gorman, A. M.	430 10	1928	Lister, D. T.	245 04
1926	Gould, W.	303 60	1925	Logan, W. J.	318 48
1928	Goyette, H.	146 64	1928	Loughran, F.	332 40
1927	Graham, L. D.	424 80	1926	Love, R. A.	119 89
1928	Graham, M. H.	655 56	1926	Lower, W. J.	101 40
1926	Grant, G.	162 84	1928	Lunan, J. E.	458 76
1926	Gribble, F. J.	193 92	1926	Lutz, H.	256 08
1926	Grier, J. W.	242 04	1926	Macdonald, A.	185 28
1928	Hair, H.	257 88	1928	Mackenrot, W. H.	320 88
1928	Harney, W. T.	182 37	1928	MacIntyre, A. C.	78 39
1925	Harris, G. A.	88 11	1926	MacMahon, M. J.	280 68
1928	Harris, W. F.	344 09	1925	MacMartin, L. J.	258 84
1926	Hartwell, G. M.	359 04	1928	MacQueen, J. D.	3 00
1928	Harvey, G. H.	211 85	1927	MacRostie, N. H.	194 28
1926	Haslam, G. S.	171 12	1928	Maitland, F. P. A.	256 80
1925	Haughton, J.	205 80	1928	Mallette, L.	201 48
1926	Hawkins, T. T.	481 68	1928	Manhard, L. E.	396 72
1926	Haynes, A. T.	278 30	1925	Marchand, A. H.	184 80
1926	Heavers, T.	520 84	1927	Matheson, T. G.	100 62
1928	Henley, W. C.	249 19	1925	Mathieu, L. J.	1,001 00
1927	Hennessey, G. F.	504 00	1928	May, O.	656 40
1926	Hillock, P. J.	359 69	1924	Meiklejohn, H. J.	278 04
1928	Holland, W. J.	530 64	1926	Merrigan, J. A.	247 13
1928	Hudon, M. L. E.	1,194 72	1925	Meyer, F. W.	325 80
1928	Hugg, Claire	493 08	1925	Middleton, G.	436 32
1928	Hurst, L. B.	456 84	*1926	Moloney, M.	301 68
1928	Hutchinson, D. L.	820 19	1926	Morden, J. R.	399 00
1928	Hynes, M. E.	169 40	1926	Morden, W. R.	209 28
1926	Irwin, W. N.	115 08	1928	Morton, G.	272 64
1928	Isaac, J. S.	447 58	1928	Moule, W. J.	449 40
1924	Ivey, W. J.	398 28	1926	Mowat, A.	588 00
1925	Jack, S. R.	283 44	1928	Mundell, E.	152 28
1928	Jackson, O.	204 68	1926	McCann, B. C.	533 40
1927	Jarvis, A. L. F.	1,694 93	1928	McDonald, A. B.	653 63
1928	Johnson, W. E.	307 56	1925	McDougall, P.	316 56
1928	Johnston, C.	197 40	1928	McEvoy, S. T.	420 24
1926	Jones, F.	252 36	1928	McLaughlin, H.	277 38
1925	Jordan, J. E.	86 64	1925	McLay, J.	176 04
1928	Joss, D.	57 72	1928	McLean, G. F.	157 68
1925	Kane, M.	356 59	1928	McNab, G. F.	300 53
1926	Kavanagh, F.	263 64	1925	McNeill, M. P.	282 37
1928	Keeler, R. M.	398 22	1925	McPhee, J. E.	401 64
1928	Keigan, D. G.	336 70	1926	Newton, T.	143 04
1924	Kirk, F.	636 84	1928	Nisbet, J.	196 56
1926	Kirkpatrick, J. R.	191 76	1928	Nuttall, W. A.	420 72
1928	Kirkpatrick, R. A.	231 35	1927	O'Brien, P. J.	873 36
1928	Kirkpatrick, W. L.	143 40	1928	O'Sullivan, E.	239 54
1928	Labelle, J. A.	218 40	1928	Ogilvie, E. F.	299 42
1926	Laflamme, J. K.	842 64	1926	Orr, R. D.	289 92
1928	Lalonde, J. M.	367 44	1928	Painchaud, C. F.	713 10

Appendix No. 10—Continued

AMOUNTS paid as superannuation during the year ended March 31, 1929, to employees retired prior to March 31, 1928—*Concluded*

Died in	Name	Amount paid	Died in	Name	Amount paid
	SUPERANNUATION No. 5 *Annuities to dependents of deceased employees*	$ cts.		SUPERANNUATION No. 5 *Annuities to dependents of deceased employees*	$ cts.
1926	Palen, A. F.	483 00	1927	Strachan, A.	442 44
1925	Pansera, A.	251 28	1925	Sturgess, A. W.	268 44
1926	Paradis, J.	346 68	1925	St. Denis, J.	597 36
1926	Parent, V. A.	328 08	1928	Tague, H. O.	241 56
1926	Partridge, G.	330 60	1925	Tansey, T. P.	446 04
1927	Paterson, A. C.	1,260 00	1927	Taschereau, E. R. A.	731 16
1928	Patterson, H. W.	532 06	1928	Taylor, C. H.	269 16
1928	Pearce, W. J. H.	337 68	1925	Trafton, L.	191 28
1925	Peters, D. L.	239 76	1926	Tremaine, A. de B.	699 96
1928	Poissant, I.	411 12	1928	Tremblay, J.	645 96
1926	Pope, Sir Joseph	2,799 96	1928	Trudeau, H.	289 08
1928	Poulin, C. E.	89 71	1926	Vaughan, J. H.	397 68
1928	Powell, H. H.	271 92	1927	Veats, F.	368 64
1928	Prairie, S.	442 49	1924	Vézina, D.	235 68
1928	Pretty, J. M.	799 92	1925	Walker, D. J.	33 10
1926	Quinn, T.	227 50	1926	Wallis, C. J.	306 00
1926	Regan, P.	367 44	1926	Ward, L. H.	158 04
1926	Reid, J.	285 24	1928	Ware, J. A.	449 76
1926	Renouf, J.	187 44	1928	Warren, R. V.	775 51
1926	Reynard, M. C.	798 00	1928	Waterfield, C. W.	283 18
1926	Robertson, D.	417 96	1928	Webb, S. A.	234 20
1928	Robitaille, E.	144 96	1926	Webster, F. T.	85 30
1925	Rogers, D. T.	284 04	1928	Welch, R.	111 84
1926	Rose, L. F.	380 88	1928	Westman, T.	762 48
1928	Rose, W. H.	582 12	1926	Whalley, W.	243 36
1928	Ross, J. D.	275 00	1925	White, J.	258 48
1928	Ross, R. H.	365 16	1928	White, James	2,293 10
1926	Royal, J. A.	744 24	1926	Whitelaw, G.	278 04
1925	Scott, Thos.	133 44	1926	Whittaker, E. J.	232 80
1926	Scott, W.	141 00	1928	Wickens, F.	165 92
1927	Sealy, J. C.	248 64	1928	Williams, G. T.	190 20
1925	Shephard, F. B.	238 20	1926	Williams, J. H.	176 02
1928	Shipman, C. W.	108 60	1924	Williamson, J. G.	165 00
1925	Sigman, G. A.	98 40	1927	Wilson, A. E.	426 49
1928	Skelly, J. J.	1,067 28	1925	Winter, H. G.	367 44
1926	Smart, T. A.	342 00	1925	Wise, F. A.	1,477 44
1926	Smith, A.	172 68	1926	Wismer, D. L.	170 28
1928	Smith, Albert E.	314 52	1925	Witzig, F. X.	446 28
1927	Smith, W. B.	315 00	1926	Wright, J. C.	179 52
1928	Somers, F.	483 12	*1928	Wright, R. J.	95 50
1928	Speedy, L. G.	292 15	1928	Worrel, J.	218 64
1925	Spicer, A.	264 55	1926	Young, A.	315 72
1928	Stanford, E.	210 36	1925	Young, T. T.	299 28
1925	Stevenson, J. S.	729 84			
1925	Stewart, W. J.	1,680 00			118,728 36
1928	Stock, J. J.	603 67			

* Dead.

Appendix No. 10—Continued

ALLOWANCES granted as Superannuation and amounts paid to employees retired during the year ended March 31, 1929

Name and nature of service	Cause of retirement	Age at retirement	Number of years service	Number of years to count	Salary at time of retirement	Average salary	Annual allowance	Amount paid during the fiscal year
					$ cts.	$ cts.	$ cts.	$ cts.
SUPERANNUATION FUND No. 1								
Blaikie, J. A., Sub-Collector, National Revenue	Age	66	38	.....	985 00	1,010 00	689 50	172 35
Corcoran, John, Postal Clerk, Post Office	Age	70	45	.....	1,740 00	1,664 34	1,165 32	46 99
*Creighton, Robert R., Parole Officer, Justice	Age	67	46	.....	3,420 00	3,360 00	2,352 00	1,176 00
McRoberts, J. E., Senior Postal Clerk, Post Office	Age	66	43	.....	1,740 00	1,710 00	1,197 00	598 50
Power, Charles Edward, Railway Mail Clerk, Post Office	Age	65	46	.....	1,800 00	1,761 67	1,233 17	1,130 36
Smith, Vincent, Letter Carrier, Post Office	Ill health	59	37	.....	1,500 00	1,460 00	1,022 00	1,021 92
Theriault, E. E., Sub-Collector, National Revenue	Ill health	60	36	.....	460 00	438 32	306 82	25 56
							7,965 81	4,171 68
SUPERANNUATION FUND No. 2								
Beattie, Victor B., Letter Carrier, Post Office	Ill health	56	35	.....	1,500 00	1,465 00	1,025 50	769 05
SUPERANNUATION FUND No. 5								
Abra, S. B., Elevator Operator, Public Works	Age	70	14 2/12	8 1/12	1,260 00	1,145 00	202 28	185 35
Alexander, J. J., Mail Porter, Post Office	Ill health	46	25 5/12	25 5/12	1,500 00	1,416 00	719 80	719 76
Anderson, T., Immigration Inspector, Immigration and Colonization	Age	67	17 6/12	17 6/12	1,800 00	1,672 00	585 20	195 04
Appleby, J., Fireman, Public Works	Age	66	19 4/12	19 4/12	1,380 00	1,265 00	489 13	448 36
*Argue, M., Deportation Officer, Immigration and Colonization	Age	69	16 3/12	16 3/12	1,430 00	1,361 00	442 32	294 88
Armstrong, W., Superintendent of Methylation, National Revenue	Age	73	41 7/12	35	2,800 00	2,800 00	1,960 00	326 66
Aymong, R. A., Superintendent of Secretarial Branch, Post Office	Age	65	48 9/12	35	3,360 00	3,210 00	2,247 00	1,685 25
Badeaux, L. B. N., Customs and Excise Clerk, National Revenue	Age	71	15 2/12	15 2/12	1,740 00	1,691 74	513 16	131 04
Baker, F. M., Chief Clerk, External Affairs	Ill health	60	38	35	4,000 00	3,833 33	2,683 33	2,683 33
Banford, Wm., Inspector, Immigration and Colonization	Age	71	14 5/12	11	1,800 00	1,681 81	370 00	171 05
Barcelo, J. C. H., Senior Letter Carrier, Post Office	Ill health	63	35 7/12	35	1,680 00	1,653 66	1,157 56	367 17
Barsalou, A., Clerk, Grade 3, Public Works	Age	68	21 1/12	21 1/12	1,620 00	1,607 64	704 68	58 72
Bedlow, J. S., Customs and Excise Clerk, National Revenue	Ill health	48	11 7/12	11 7/12	1,740 00	1,648 00	381 79	254 48
Bell, B. H., Draftsman, Public Works	Ill health	44	23 7/12	23 7/12	1,800 00	1,672 00	788 63	722 81
Belleau, G. N., Clerk, Grade 2, Marine	Age	71	14 3/12	14 3/12	1,480 00	1,432 00	408 12	136 04
Eiband, V., Postal Clerk, Post Office	Age	69	16 1/12	16 1/12	1,740 00	1,660 00	533 96	489 39
Eible, J. E., Clerk, Grade 2, Immigration and Colonization	Ill health	64	12 5/12	12 5/12	1,440 00	1,383 00	343 45	200 34

Appendix No. 10—Continued

ALLOWANCES granted as Superannuation and amounts paid to employees retired during the year ended March 31, 1929—*Con.*

Name and nature of service	Cause of retirement	Age at retirement	Number of years service	Number of years to count	Salary at time of retirement	Average salary	Annual allowance	Amount paid during the fiscal year
SUPERANNUATION FUND No. 5—*Continued*					$ cts.	$ cts.	$ cts.	$ cts.
Birks, J. B., Customs and Excise Examiner, National Revenue	Age	74	27 3/12	27 3/12	1,740 00	1,641 00	891 61	668 70
Blakeley, J. H., Senior Customs and Excise Clerk, National Revenue	Age	70	25 11/12	25 11/12	2,220 00	2,124 00	1,100 94	733 92
Bletcher, W. G., Collector of Customs and Excise, National Revenue	Age	75	30	30	1,920 00	1,849 42	1,109 65	706 95
Boggs, H. J., Supervisor of Mails, Post Office	Age	70	45 3/12	35	2,400 00	2,330 00	1,631 00	1,223 16
Bouchard, J. M. A., Customs and Excise Examiner, National Revenue	Age	74	22 3/12	22 3/12	1,740 00	1,694 99	768 40	86 90
Boyd, M., Head Postal Clerk, Post Office	Age	65	45 4/12	35	3,000 00	2,850 00	1,995 00	498 75
Brady, M., Head Clerk, Interior	Age	73	49 8/12	35	3,000 00	2,944 66	2,061 27	790 14
Brault, J. S., Mail Porter, Post Office	Age	66	11 10/12	11 10/12	1,500 00	1,456 00	344 59	57 42
Bremner, C. H., Clerk, Grade 1, National Defence	Ill health	41	11 3/12	7 11/12	1,020 00	864 62	136 90	79 80
Bryenton, S. O., Customs and Excise Clerk, National Revenue	Ill health	30	11 8/12	11 8/12	1,740 00	2,100 83	479 69	646 18
Burnham, J. W., Customs-Excise Enforcement Officer, National Revenue	Age	72	21 3/12	21 3/12	1,140 00	1,096 14	464 03	52 46
*Byrne, F. E., Clerk Grade 3, Archives	Ill health	46	16 1/12	11 8/12	1,680 00	1,515 00	345 92	345 84
Byrne, W. P., Customs & Excise Examiner, National Revenue	Ill health	55	21 4/12	21 4/12	1,740 00	1,664 00	709 97	473 28
Campsall, N. M., Clerk Grade 2, Trade & Commerce	Ill health	39	10 4/12	10 1/12	1,380 00	1,071 05	216 00	.....
*Capreol, F. C., Clerk Grade 4, Interior	Age	71	45 10/12	35	2,100 00	2,100 00	1,470 00	1,102 50
Carleton, W. H., Principal Clerk, National Revenue	Ill health	56	44 3/12	35	2,400 00	2,297 56	1,608 28	1,255 32
Carrothers, A., Supervisor of Mails, Post Office	Age	69	46 6/12	35	2,400 00	2,340 00	1,638 00	819 00
Chamard, J., District Superintendent of Postal Service, Post Office	Age	72	48 11/12	35	4,620 00	4,545 37	3,181 75	2,754 03
Cheatley, P., Postal Clerk, Post Office	Age	68	35 3/12	35	1,740 00	1,700 00	1,190 00	1,189 92
Chisholm, W. N., Customs and Excise Clerk, National Revenue	Age	69	37 1/12	35	1,740 00	1,705 00	1,193 50	895 05
Choquette, S., Senior Translator, Post Office	Ill health	61	36 7/12	35	2,400 00	2,326 00	1,628 20	135 68
Churchouse, E., Clerk, Grade 3, External Affairs	Ill health	62	42 9/12	35	2,100 00	2,100 00	1,470 00	1,470 00
Clark, J. H., Letter Carrier Overseer, Post Office	Age	70	35 10/12	35	1,920 00	1,856 00	1,299 66	758 10
Clewlo, O. S., Inspector of Customs and Excise, National Revenue	Age	67	35 1/12	35	3,720 00	3,663 33	2,564 33	1,068 45
Cline, J. H., Collector of Customs and Excise, National Revenue	Age	65	34 7/12	34 7/12	2,340 00	2,034 00	1,406 85	937 84
Collier, J. H., Postmaster, Post Office	Age	70	14 2/12	12 2/12	2,640 00	2,546 00	632 26	579 48
Cook, H., Inspector of Dominion Lands, Interior	Age	69	14 3/12	10 11/12	1,920 00	1,839 00	401 52	.....
Cook, S. B., Lightkeeper, Marine	Age	65	31 8/12	31 8/12	1,970 00	1,895 73	1,200 63	139 35
Corbeil, Z., Customs-Excise Examiner, National Revenue	Age	70	23	23	1,740 00	1,645 06	756 73	530 92
Gormier, W. E., Sub-Collector, National Revenue	Abolition of office	61	16 1/12	16 1/12	1,020 00	965 50	310 57	77 64

Coulter, Thos., Sub-Collector, National Revenue	Ill health	64	16 8/12	16 8/12	1,740 00	1,674 00	552 42	230 15
Crooke, G., Examiner, National Revenue	Age	73	16 4/12	15 10/12	1,740 00	1,624 64	514 46	360 94
Curran, M. A., Stenographer, Grade 3, Post Office	Ill health	53	33 7/12	33 7/12	1,680 00	1,680 00	1,134 00	713 32
Cuttle, H. G., Superintendent Dominion Lands Agencies, Interior	Abolition of office	62	16 7/12	16 7/12	4,320 00	4,136 00	1,344 20	896 08
Daly, J. A., Sub-Collector, National Revenue	Age	66	28 8/12	28 8/12	1,740 00	1,656 00	949 44	949 44
Daoust, A., Bridgemaster, Railways and Canals	Ill health	60	20 10/12	12 1/12	1,170 00	951 36	237 84	42 84
Dawe, H. R., Senior Radio Electrician, Marine	Ill health	40	16 1/12	16 1/12	2,340 00	2,244 00	721 82	721 80
de la Giroday, E., Letter Carrier, Post Office	Ill health	38	11 4/12	11 4/12	1,500 00	1,375 87	311 86	403 10
Demers, J. W., Postal Clerk, Post Office	Ill health	55	37 2/12	35	1,620 00	1,580 00	1,106 00	1,105 92
Desautels, M. J., Watchman, Public Works	Age	72	14 9/12	8 8/12	1,260 00	1,135 00	187 27	62 40
Desmeules, H., Lightkeeper, Grade 2, Marine	Age	65	19 6/12	19 6/12	1,820 00	1,744 00	680 16	113 36
Digby, Thos., Immigration Inspector, Immigration and Colonization	Age	68	16 8/12	16 8/12	1,800 00	1,620 00	526 50	219 35
Dion, T., Mail Porter, Post Office	Age	65	11	11	1,500 00	1,427 73	314 10	80 25
Donnelly, H. H., Chief Industrial Officer, Penitentiaries	Ill health	41	11 1/12	11 1/12	2,400 00	2,026 00	479 48	.....
Dooley, M., Messenger, National Revenue	Age	74	22 9/12	22 9/12	1,300 00	1,233 58	561 28	63 47
Doyle, B. J., Special Exciseman, National Revenue	Age	72	40 2/12	35	2,460 00	2,415 48	1,690 84	191 22
Drought, F. A., Principal Draughtsman, Railways and Canals	Ill health	60	23	23	2,700 00	2,626 00	1,207 96	.....
*Dube, W., Clerk of Petitions, House of Commons	Ill health	59	42 9/12	35	1,800 00	1,720 00	1,204 00	902 97
Ducharme, J. P. L., Superintendent, Inspection of Postal Service, Post Office	Ill health	57	13 2/12	13 2/12	2,940 00	2,884 00	759 45	1,772 02
Dunlop, W. J., Assistant Customs Appraiser, National Revenue	Age	66	40 10/12	35	2,280 00	2,210 00	1,547 00	1,160 19
Durantel, S. L. E., Head Translator, Trade and Commerce	Ill health	58	11 5/12	11 5/12	3,420 00	3,332 00	760 80	507 20
Durham, R. F., Senior Postal Clerk, Post Office	Age	60	45 4/12	35	2,040 00	1,990 00	1,393 00	348 24
Eakins, G. G., Customs-Excise Clerk, National Revenue	Age	72	19	18 8/12	1,740 00	1,701 48	635 22	22 20
Eason, A. R., Railway Mail Clerk, Post Office	Ill health	55	28 5/12	28 5/12	1,800 00	1,724 00	979 81	816 50
Elliott, T. H., Customs-Excise Examiner, National Revenue	Age	69	35 1/12	35	1,740 00	1,677 00	1,173 90	.....
Ellis, W. L., Medical Officer, Grade 1, Health	Ill health	58	26 3/12	15 4/12	2,760 00	2,138 04	655 67	101 45
Fallis, W. J., Truckman, Printing and Stationery	Ill health	62	39 1/12	35	1,340 00	1,274 41	892 09	90 27
Ferrah, Wm. A., Sub-Collector Customs and Excise, Grade 1, National Revenue	Age	72	12 6/12	12 4/12	1,740 00	1,702 06	419 84	16 92
Ferguson, F., Postal Clerk, Post Office	Ill health	62	43 4/12	35	1,740 00	1,695 00	1,186 50	1,087 57
Foley, W. J., Letter Carrier, Post Office	Ill health	48	23 1/12	23 5/12	1,500 00	1,441 81	675 25	312 21
Gamble, E., Clerk, Grade 2, Interior	Age	70	20 3/12	20 3/12	1,380 00	1,325 47	536 81	186 37
Genge, R. E., Postal Clerk, Post Office	Age	66	40 3/12	35	1,740 00	1,655 00	1,158 50	482 70
Gibson, D. R., Senior Customs-Excise Clerk, National Revenue	Age	75	30 9/12	30 9/12	2,220 00	2,130 00	1,309 95	654 96
Gleeson, W., Surveyor Customs and Excise No. 5. National Revenue	Age	74	42	35	2,880 00	2,644 29	1,851 00	.....
Gosse, J. F., Lightkeeper, Marine	Age	71	19 4/12	11 9/12	930 00	812 03	190 83	56 42
Gouin, E., Customs and Excise Clerk, National Revenue	Age	72	28 1/12	28 1/12	1,740 00	1,647 16	952 60	902 28
Gould, H. J., Investigator of Values, National Revenue	Ill health	50	26 1/12	26 9/12	5,040 00	4,944 00	2,645 04	2,645 04
Goulding, J. E., caretaker, Public Works	Age	69	11 7/12	11 7/12	1,380 00	1,305 00	306 67	76 65
Gravel, W., Clerk Grade 3, Royal Canadian Mounted Police	Ill health	48	26 3/12	26 3/12	2,100 00	2,093 34	1,095 51	639 03
*Groulx, J. R. H., Packer and Helper, Printing and Stationery	Ill health	56	13 4/12	13 4/12	1,320 00	1,202 50	320 67	40 08
Guild, R., Mail Porter, Post Office	Age	65	16	16	1,500 00	1,416 00	453 12	453 12
Guy, R. M., Senior Postal Clerk, Post Office	Ill health	62	37 1/12	35	2,040 00	1,983 33	1,388 33	578 45
Hall, C., Customs-Excise Examiner, National Revenue	Age	71	16 1/12	16 1/12	1,740 00	1,655 00	532 36	310 52
Hamilton, Alex., Customs-Excise Examiner, National Revenue	Age	70	24	22 1/12	1,740 00	1,694 18	759 56	106 23
Hamilton, C. E., Account Clerk, Public Works	Age	75	15 8/12	9 8/12	1,440 00	1,381 84	260 25	160 15
Harkness, G. C., Customs Appraiser, National Revenue	Age	71	16 5/12	16 5/12	2,520 00	2,446 41	791 01	84 74

Appendix No. 10—Continued

ALLOWANCES granted as Superannuation and amounts paid to employees retired during the year ended March 31, 1929—*Con.*

Name and nature of service	Cause of retirement	Age at retirement	Number of years service	Number of years to count	Salary at time of retirement	Average salary	Annual allowance	Amount paid during the fiscal year
					$ cts.	$ cts.	$ cts.	$ cts.
Harrison, F. E., Postmaster, Post Office	Age	67	43 10/12	35	4,680 00	4,565 00	3,195 50	2,396 61
Harty, M. J., Messenger, National Revenue	Age	72	20 7/12	20 7/12	1,300 00	1,187 09	488 68	430 84
Hinds, M. A., Clerk, Grade 2, Post Office	Age	66	39 3/12	35	1,600 00	1,600 00	1,120 00	689 44
Hodd, Frank, Senior Postal Clerk, Post Office	Age	66	39 7/12	35	2,040 00	1,980 00	1,386 00	693 00
Hodgson, J., Collector of Customs and Excise, National Revenue	Age	67	16 3/12	16 3/12	1,920 00	1,860 00	604 50	302 22
Holmes, R., Surveyor of Customs and Excise, National Revenue	Age	74	19 5/12	19 5/12	4,140 00	3,849 48	1,494 88	1,048 80
Hood, T. A., Senior Customs and Excise Clerk, National Revenue	Ill health	62	40 10/12	35	2,220 00	2,150 00	1,505 00	1,128 69
Horne, A. H., Postmaster, Post Office	Age	68	24 8/12	17 7/12	2,640 00	2,556 00	898 86	449 40
Howe, H., Messenger, Public Works	Age	67	16	9	1,020 00	924 00	166 32	152 46
Hutchinson, D. A., Assistant Customs Appraiser, National Revenue	Ill health	51	14 10/12	14 10/12	2,280 00	2,039 13	604 94	
Hutton, W., Letter Carrier, Post Office	Ill health	63	36 10/12	35	1,500 00	1,465 00	1,025 50	769 05
Inches, D., Stationary Engineer Heating, Grade 2, Public Works	Age	72	19 9/12	11 7/12	1,500 00	1,452 87	336 58	104 01
Ingall, E. D., Chief Division of Borings, Mines	Age	70	44 4/12	35	4,320 00	4,264 67	2,985 27	1,144 34
Jamieson, J. W., Customs-Excise Examiner, National Revenue	Ill health	59	35 1/12	21 7/12	2,460 00	2,201 00	950 09	633 36
Jeffery, W. H., Principal Clerk, Post Office	Age	65	36 4/12	35	2,400 00	2,152 89	1,507 02	820 46
Johnston, I., Lockmaster, Railways and Canals	Age	76	22 10/12	22 10/12	1,230 00	975 49	445 47	428 12
Jones, T. F., Railway Mail Clerk, Post Office	Ill health	46	14 1/12	14 6/12	1,800 00	1,746 77	506 56	121 18
Juneau, Jos., Letter Carrier, Post Office	Ill health	52	21 8/12	21 8/12	1,500 00	1,449 93	628 30	184 07
Kennedy, E. T., Caretaker, Health	Ill health	60	17	12	1,260 00	1,188 00	285 12	166 32
Kenny, H. J., Railway Mail Clerk, Post Office	Age	70	24 8/12	24 8/12	1,800 00	1,716 00	840 84	840 84
Labelle, L., Mail Porter, Post Office	Age	67	11 4/12	10 9/12	1,500 00	1,456 00	313 04	52 16
Lanctot, J. M. A., Customs-Excise Examiner, National Revenue	Age	71	27 7/12	26 7/12	1,740 00	1,694 99	903 99	102 23
Lanthier, E., Inspector of Weights and Measures, Trade and Commerce	Age	69	13 7/12	13 7/12	1,860 00	1,712 00	465 09	310 00
Lanthier, J. E., Postal Clerk, Post Office	Ill health	46	16 2/12	15 10/12	1,740 00	1,663 16	526 67	393 50
Laverriere, J., Clerk Grade 1, National Defence	Age	65	19 2/12	11 7/12	1,020 00	935 77	216 79	142 15
Lavigueur, F. X., Mail Porter, Post Office	Age	68	16 11/12	16 11/12	1,500 00	1,460 00	493 96	41 16
Lee, J. R., Caretaker, Public Works	Age	70	12 10/12	7 7/12	1,380 00	1,265 00	187 64	171 93
Lipsett, R., Mail Porter, Post Office	Age	71	14 9/12	14 9/12	1,500 00	1,424 00	420 08	350 00
Lockhart, C. B., Collector of Customs and Excise, National Revenue	Age	73	12 2/12	12 2/12	3,720 00	3,631 16	883 58	619 92
Long, J., Lightkeeper, Marine	Age	73	31 8/12	16 7/12	1,166 00	1,046 00	346 92	86 73
Lortie, J. A., Inspector of Weights and Measures, Trade and Commerce	Ill health	50	16 3/12	16 3/12	1,860 00	1,702 00	553 15	460 90
Loverin, F. McD., Clerk Grade 4, Auditor General	Ill health	47	24 3/12	24 3/12	1,920 00	1,807 00	876 40	73 03

Macdonald, Jas., Sub-Collector, National Revenue	Age	68	23 11/12	23 3/12	1,260 00	1,206 00	560 79	140 19
MacKenzie, D. C., Clerk Grade 4, Penitentiaries	Ill health	59	24 1/12	24 1/12	1,860 00	1,610 13	775 55	758 21
MacQueen, G. R., Clerk Grade 3, Post Office	Age	70	45 9/12	35	2,100 00	2,100 00	1,470 00	367 50
McCoy, E. H., Canal Superintendent, Grade 2, Railways and Canals	Age	71	24 3/12	16 7/12	1,800 00	1,716 00	569 14	
McDougall, J. A., Senior Customs and Excise Examiner, National Revenue	Age	65	42 9/12	35	1,920 00	1,852 00	1,296 40	864 24
McFarland, W., Supervisor of Mails, Grade 8A, Post Office	Age	66	41 6/12	35	2,520 00	2,380 00	1,666 00	416 49
McFarlane, A., Lightkeeper, Marine	Age	72	35 1/12	19 10/12	1,310 00	1,163 00	461 32	345 96
McLaughlin, A., Customs Appraiser, National Revenue	Age	74	21 1/12	21 1/12	3,000 00	2,865 48	1,208 27	847 66
McLean, A. A., Financial Controller, with rank of Deputy Minister, Royal Canadian Mounted Police	Age	73	10 11/12	10 11/12	6,000 00	6,000 00	1,310 00	764 12
McLeod, J. A., Sub-Collector, National Revenue	Abolition of office	72	13 3/12	12 11/12	780 00	725 42	187 40	48 34
McQuire, G. C., Inspector of Customs and Excise, National Revenue	Age	66	37 9/12	35	3,720 00	3,646 00	2,552 20	
Maitland, M. J., Postal Clerk, Post Office	Age	66	44 10/12	35	1,740 00	1,718 33	1,202 83	100 23
Malouin, L., Lightkeeper and Meteorological Observer, Marine	Ill health	49	16 9/12	16 9/12	1,868 00	1,764 05	590 96	
Miller, M. A., Clerk, Grade 4, Post Office	Ill health	62	32 1/12	32 1/12	1,920 00	1,804 00	1,157 57	771 68
*Miller, R., Mail Porter, Post Office	Age	67	45 9/12	35	1,500 00	1,460 00	1,022 00	936 76
Mireault, H., Letter Carrier, Post Office	Ill health	50	21 6/12	21 6/12	1,500 00	1,452 26	624 47	152 73
Moore, F. W., Letter Carrier, Post Office	Ill health	49	15 4/12	15 4/12	1,500 00	1,452 00	445 28	111 30
Moranville, D. F., Customs-Excise Examiner, Post Office	Ill health	51	15 7/12	15 4/12	1,740 00	1,620 00	248 40	496 80
Murphy, P. J., Postal Clerk, Post Office	Ill health	63	28 10/12	28 10/12	1,740 00	1,667 90	961 82	480 90
Neelands, H. G., Sub-Collector, National Revenue	Age	70	12 5/12	11 7/12	1,500 00	1,419 00	328 74	246 51
Neely, F. S., Stationary Engineer, Grade 1, Public Works		69	11 6/12	11 6/12	1,440 00	1,320 00	303 60	303 60
O'Grady, D. J., Assistant Customs Appraiser, National Revenue	Age	70	37 9/12	35	2,280 00	2,200 00	1,540 00	256 66
O'Neill, A. P., Collector of Customs and Excise, National Revenue	Ill health	48	16 1/12	16 1/12	1,920 00	1,861 03	598 63	286 40
Osterhaut, H. G., Customs-Excise Examiner, National Revenue	Age	71	24 4/12	24 4/12	1,740 00	1,676 45	815 87	267 53
Ovens, T., Lay Inspector, Agriculture	Ill health	64	10 6/12	10 6/12	1,620 00	1,552 00	315 57	26 29
Panter, G. C., Postal Clerk, Post Office	Ill health	32	12 5/12	12 5/12	1,740 00	1,620 76	402 48	402 48
Parkinson, N. F., Deputy Minister, Soldier Civil Re-Establishment	Abolition of office	38	10 3/12	10 3/12	6,000 00	6,000 00	1,280 00	319 98
Pariseau, J. A., Customs-Excise Enforcement Officer, National Revenue	Age	69	16 11/12	14 10/12	1,320 00	1,280 00	379 73	63 28
Parkman, E., Sub-Collector, National Revenue	Age	70	16 6/12	16	1,080 00	1,008 32	322 66	137 00
Payne, H. J., Postal Clerk, Post Office	Age	69	38 9/12	35	1,620 00	1,590 00	1,113 00	556 50
Peebles, Wm., Assistant Customs Appraiser, National Revenue	Age	74	32 3/12	32 3/12	2,280 00	2,203 32	1,421 14	160 71
Peers, H. L., Postal Clerk, Post Office	Ill-health	50	10 6/12	10 6/12	1,740 00	1,679 00	349 79	29 14
Perron, J. C., Postal Clerk, Post Office	Age	65	11 6/12	11 4/12	1,740 00	1,690 00	383 07	63 84
*Plamondon, J., Postal Clerk, Post Office	Age	70	10 6/12	10 6/12	1,740 00	1,641 00	350 08	145 85
Pollock, W. C., Sub-Collector, Grade 1, National Revenue	Abolition of office	63	29 6/12	29 6/12	1,740 00	1,696 00	1,006 29	167 70
Price, S. L., Postal Clerk, Post Office	Ill health	52	10 9/12	9 4/12	1,740 00	1,610 00	300 53	
Purtell, J. J., Senior Letter Carrier, Post Office	Age	65	35 3/12	35	1,680 00	1,640 00	1,148 00	1,147 92
Reid, A. L., Postal Clerk, Post Office	Ill health	57	35 6/12	35	1,740 00	1,666 00	1,166 20	923 21
Rivet, A., Engineer, Grade 2, Public Works	Age	68	16 5/12	16 5/12	1,500 00	1,433 42	470 63	399 69
Rivier, C. E., Principal Translator, Mines	Age	76	11 6/12	11 6/12	3,000 00	2,694 00	619 62	464 67
Riviere, J., Lock Motorman, Railways and Canals	Age	70	17 7/12	11	1,170 00	944 50	207 79	121 17
*Roberge, A., Letter Carrier, Post Office	Ill health	40	19 9/12	19 9/12	1,500 00	1,421 78	561 60	255 14
Robertson, A. S., Principal Traffic Clerk, Radio Service, Marine	Ill health	63	16 6/12	16 6/12	2,520 00	2,363 60	787 86	332 63
Rolland, M. L., Postal Clerk, Post Office	Ill health	57	13 3/12	13 3/12	1,620 00	1,478 00	391 67	326 30

Appendix No. 10—Continued

ALLOWANCES granted as Superannuation and amounts paid to employees retired during the year ended March 31, 1929—*Con.*

Name and nature of service	Cause of retirement	Age at retirement	Number of years service	Number of years to count	Salary at time of retirement	Average salary	Annual allowance	Amount paid during the fiscal year
					$ cts.	$ cts.	$ cts.	$ cts.
Ruggles, J. R., Collector of Customs and Excise, National Revenue	Age	70	34	34	1,380 00	1,341 67	912 33	836 22
Sandilands, J., Lockmaster, Railways and Canals	Age	70	13 7/12	13 7/12	1,200 00	1,085 00	294 76	270 16
Senecal, P., Postal Clerk, Post Office	Ill health	34	16 9/12	16 9/12	1,740 00	1,689 00	565 82	141 45
Shields, E. E., Clerk, Grade 3, Interior	Ill health	65	29 8/12	29 8/12	1,680 00	1,670 40	991 10	792 86
Sinclair, Jas., Customs Truckman, National Revenue	Age	74	25 6/12	25 6/12	1,500 00	1,459 04	744 11	84 14
Smith, Duncan, Greenhouseman, Public Works	Age	74	20 9/12	12 5/12	1,440 00	1,366 13	339 26	78 43
Smith, H. T., Lightkeeper, Marine	Ill health	63	17 1/12	17 1/12	1,760 00	1,676 00	572 63	572 52
Snow, A. T., Junior Auditor of Printing Accounts, Printing and Stationery	Age	70	39 9/12	35	2,520 00	2,466 67	1,726 67	575 52
Songhurst, G. J., Postal Clerk, Post Office	Age	65	11 7/12	11 7/12	1,620 00	1,542 00	357 23	59 52
Sorley, J. S., Principal Customs Receiving Clerk, National Revenue	Age	67	47 3/12	35	2,460 00	2,393 33	1,675 33	1,116 88
Sproule, N. H., Sub-Collector of Customs and Excise, National Revenue	Age	73	15 1/12	15 1/12	1,740 00	1,702 32	539 07	18 84
Stanton, Richard, Sr. Postal Clerk, Post Office	Age	68	11 1/12	11 1/12	1,620 00	1,486 63	329 53	219 68
Stevenson, J. A., Veterinary Inspector, Agriculture	Ill health	62	21 9/12	21 9/12	2,520 00	2,430 77	1,057 38	758 88
Stewart, M. C., Herbarium Assistant, Mines	Ill health	63	27	27	1,680 00	1,548 33	836 10	329 77
Stockton, C. W., Examiner, National Revenue	Age	71	16	15 8/12	1,440 00	1,361 90	426 73	299 39
Stollery, J. D., Mail Porter, Post Office	Age	66	12 1/12	12 1/12	1,500 00	1,431 04	367 30	244 80
Sullivan, J. M., Postal Cashier, National Revenue	Ill health	61	26 9/12	25 4/12	1,980 00	1,726 00	874 50	874 44
Teaffe, W. J., Examiner, National Revenue	Ill health	56	40 5/12	35	2,040 00	1,958 00	1,370 60	571 05
Temple, W. G., Lightkeeper, Marine	Age	75	15 4/12	15 4/12	1,310 00	1,175 77	360 57	215 13
Thompson, A., Postmaster, Post Office	Age	68	51 4/12	35	3,420 00	3,330 00	2,331 00	582 75
Trainor, W. E., Letter Carrier, Post Office	Ill health	40	15 8/12	15 8/12	1,500 00	1,416 00	443 68	443 64
Trant, W. H. T., Railway Mail Clerk, Post Office	Ill health	52	22 1/12	22 1/12	1,800 00	1,756 00	804 83	67 06
Tupper, E. G., Principal Account Clerk, National Defence	Age	69	16 9/12	16 9/12	2,400 00	2,193 93	734 96	489 92
Turgeon, Alex., Postal Clerk, Post Office	Ill health	41	15 7/12	15 7/12	1,620 00	1,570 00	489 32	285 39
Urquhart, D., Telegraph Operator, Marine	Age	66	15 1/12	10 1/12	1,980 00	1,888 13	399 65	330 78
Vallerand, L. N., Account Clerk, Grade 5, National Revenue	Age	72	49 7/12	35	2,220 00	2,170 00	1,519 00	379 74
Van Fleet, C. R., Engineer-caretaker, Public Works	Ill health	62	14 1/12	14 1/12	1,500 00	1,456 64	410 29	83 82
Vanstone, T. M., Customs and Excise Examiner, National Revenue	Age	69	17 2/12	13 11/12	1,740 00	1,655 00	460 64	268 66
Vogan, G. E., Elevator Operator, Public Works	Age	75	21 9/12	21 9/12	1,260 00	1,169 33	508 65	259 93
Wallace, B. H., Customs Excise Clerk, National Revenue	Ill health	59	18 6/12	18 6/12	1,740 00	1,635 00	604 95	252 05
Walton, Jos., Postal Clerk, Post Office	Age	70	10 11/12	10 11/12	1,680 00	1,551 00	338 63	28 21

Ward, Jos., Senior Hospital attendant, Immigration and Colonization	Ill health	60	$20\frac{9}{12}$	$20\frac{9}{12}$	1,500 00	1,402 13	581 88	
Ward, Lena, Matron, Immigration and Colonization	Ill health	58	22	22	1,200 00	1,102 13	484 94	
Watson, C., Caretaker, Public Works	Age	70	$16\frac{11}{12}$	$10\frac{3}{12}$	1,200 00	1,125 00	230 63	28 81
Wharton, G. H., Messenger, National Revenue	Age	64	$23\frac{1}{12}$	$23\frac{1}{12}$	1,200 00	1,115 00	514 76	214 45
Whitewell, F., Sub-Collector, Customs and Excise, Grade 2 Outport, National Revenue	Age	66	$29\frac{4}{12}$	$28\frac{11}{12}$	1,980 00	1,741 00	1,006 88	419 50
Wilkins, S. W., Surveyor of Customs and Excise, National Revenue	Age	71	$37\frac{9}{12}$	35	2,760 00	2,583 87	1,808 71	1,268 96
Wilmot, A. B., Immigration Investigating Officer, Immigration and Colonization	Ill health	60	$16\frac{5}{12}$	$16\frac{5}{12}$	2,040 00	1,956 00	642 22	321 06
Winslow, G. W., Railway Mail Clerk, Post Office	Ill health	36	$16\frac{3}{12}$	$16\frac{3}{12}$	1,800 00	1,749 55	565 69	170 31
Withers, G. E., Letter Carrier Overseer, Post Office	Age	65	$45\frac{6}{12}$	35	1,920 00	1,843 33	1,290 33	1,182 52
Wright, L. M., Clerk Grade 2, Post Office	Ill health	46	$24\frac{8}{12}$	$24\frac{8}{12}$	1,380 00	1,337 66	659 91	384 93
Young, R. D., Sub-Collector Customs and Excise, National Revenue	Abolition of office	64	$28\frac{1}{12}$	$28\frac{1}{12}$	1,500 00	1,459 00	819 47	
							182,121 76	95,650 97

Appendix No. 10—Continued

ANNUITIES granted and amounts paid to dependents of employees who died during the year ended March 31, 1929

Name of Contributor and Nature of Service	Dependent's Relationship to contributor	Age at death	Number of years service	Number of years to count	Final annual salary	Average salary	Annual allowance to dependents	Amount paid during the fiscal year
					$ cts.	$ cts.	$ cts.	$ cts.
Acres, A. G., Postmaster, Post Office	Widow	60	10 11/12	10 11/12	4,560 00	4,361 42	476 12	92 14
Argue, M., Deportation officer, Immigration and Colonization	"	69	16 1/12	16 1/12	1,430 00	1,361 00	221 16	57 67
Beaton, W. A., Assistant Architect, Public Works	"	49	22 1/12	22 1/12	2,700 00	2,608 73	806 52	647 45
Beaulieu, F. K., Letter Carrier, Post Office	"	52	16 2/12	16 2/12	1,500 00	1,425 20	345 60	279 36
Bedard, J. P. L., Postal Clerk, Post Office	"	44	21 1/12	21 1/12	1,740 00	1,644 71	538 64	328 64
Blackmore, E. H., Senior Postal Clerk, Post Office	"	51	21 3/12	21 1/12	2,040 00	1,964 26	500 88	.....
Bonenfant, H., District Fleet Master, Public Works	"	67	23	23	1,860 00	1,754 06	403 43	184 31
Boullianne, E., Damtender, Public Works	"	66	15 3/12	15 3/12	1,344 00	1,199 33	182 90	258 08
Brankin, J. F., Clerk, Grade 3, Secretary of State	"	43	28	24	1,620 00	1,438 00	517 68	273 22
Brett, E., Postal Clerk, Post Office	"	41	16 8/12	16 4/12	1,740 00	1,692 52	387 03	.....
Britton, C. A., Grain Weighman, Trade and Commerce	"	55	15 8/12	15 8/12	2,460 00	2,285 52	537 09	463 37
Brown, W. C., Collector of Customs and Excise and Registration of Shipping, National Revenue	"	58	18	18	2,760 00	2,605 60	469 00	458 54
Brunet, J. B., Lock Motorman, Railways and Canals	"	66	10 3/12	5 1/12	1,170 00	862 06	44 53	41 68
Cartier, H. J., Lightkeeper, Marine	"	59	43 7/12	23 5/12	1,220 00	1,069 95	300 65	267 46
Chapman, J. B., Customs and Excise Clerk, National Revenue	"	49	10 8/12	10 1/12	1,740 00	1,612 00	169 26	183 30
Charlston, J. L., Letter Carrier, Post Office	"	40	17 4/12	17 4/12	1,500 00	1,413 29	293 96	310 47
Clyma, J. H., Customs and Excise Examiner, National Revenue	"	67	17 9/12	17 9/12	1,740 00	2,049 24	363 74	228 79
Code, A., Inspector of Customs and Excise, National Revenue	"	60	42 4/12	35	3,720 00	3,652 58	639 20	384 85
Coppleman, S., Lock and Dam Superintendent, Public Works	Child	55	13 9/12	13 9/12	2,340 00	2,340 00	127 92	56 74
Corbeille, J. O., Customs and Excise Examiner, National Revenue	Widow	57	16 7/12	16 7/12	1,740 00	1,645 50	396 97	387 04
Cross, A. E., Real Estate Claim Adjustor, Public Works	"	66	22 9/12	23 1/12	3,720 00	3,603 20	837 74	781 87
Davies, F. W., Postal clerk, Post Office	"	43	23 5/12	23 5/12	1,740 00	1,666 40	388 83	158 76
Davis, J. H., Lightkeeper, Class 7, Marine	"	73	29 10/12	29 10/12	1,316 00	1,193 00	427 09	116 17
Demers, L. J., Postal Clerk, Post Office	"	63	20 2/12	20 1/12	3,000 00	2,738 00	552 16	492 75
Desautels, M. J., Watchman, Public Works	"	72	14 9/12	8 9/12	1,260 00	1,135 00	93 63	74 88
Dion, T., Mail Porter, Post Office	"	65	11	11	1,500 00	1,427 73	157 05	85 89
Dionne, L. N. A., Messenger, Marine	"	74	16 3/12	16 3/12	1,200 00	1,146 58	186 32	.....
Donaldson, J. C., Photographer, Interior	"	43	13 7/12	10 4/12	1,800 00	1,660 65	171 60	154 99
Dube, W., Clerk of Petitions, House of Commons	"	60	42 9/12	35	1,800 00	1,720 00	301 00	65 53
Ducharme, G., Fireman Labourer, Public Works	"	66	13 1/12	7 11/12	1,380 00	1,264 33	100 09	92 85
Dulude, L., Letter Carrier, Post Office	"	51	25 10/12	25 10/12	1,500 00	1,436 93	556 81	313 97
Dumas, J. T. F., Typist, Grade I, Marine	"	37	20	13	1,300 00	1,202 26	234 44	88 83
Dunne, J. P., Superintendent, Ordnance, Admiralty and Railway Lands Branch, Interior	"	62	42 7/12	17 8/12	3,600 00	3,519 36	615 89	625 77

Dunsmore, T. E., Secretary to Executive, National Revenue	"	41	16 3/12	16 3/12	2,100 00	1,636 71	264 60	159 33
Eldridge, J. M., Lightkeeper, Marine	"	59	22 8/12	22 8/12	1,136 00	1,036 97	282 05	643 65
Fowler, A., Immigration Inspector, Immigration and Colonization	"	52	13 7/12	13 7/12	1,800 00	1,659 83	270 55	90 91
Fredenburg, H. J., Customs Truckman, National Revenue	"	51	15 10/12	15 10/12	1,500 00	1,456 00	276 64	.....
Gagnon, J. T. H., Postal Clerk, Post Office	"	62	36 1/12	18 6/12	1,620 00	1,587 64	352 45	217 91
Galipeau, I., Clerk, Grade 2, Post Office	"	37	14 4/12	13 10/12	1,440 00	1,390 32	288 48	82 20
Gill, W. T., Postal Clerk, Post Office	"	51	11 7/12	11 7/12	1,620 00	1,556 74	216 39	80 26
Gillies, A., Assistant Division Commissioner, Immigration	"	42	22 8/12	22 8/12	3,420 00	3,183 97	721 70	.....
Godin, C. H., Superintendent, Marine Hospital Service, Health	"	56	22 5/12	22 5/12	3,480 00	3,395 53	761 16	395 38
Groulx, J. R. H., Packer and Helper, Printing and Stationery	"	56	13 4/12	13 4/12	1,320 00	1,202 50	224 45	188 80
Halladay, A. P., District Inspector, Fisheries, Marine and Fisheries	"	58	24 1/12	15 1/12	2,640 00	2,502 39	528 40	.....
Hansen, H., Coxswain, Life Saving Service, Marine	Children	53	10 1/12	10 1/12	1,500 00	1,151 68	92 91	.....
Huggins, W. H., Court Reporter, Justice	Widow	65	17 9/12	17 9/12	3,480 00	3,395 27	602 66	319 73
Hughes, J. M., Assistant Postmaster, Post Office	"	62	36 10/12	35	2,340 00	2,106 61	384 45	366 21
Hughes, P. A., Accountant, Grade 3, Trade and Commerce	Children	61	32 7/12	18 1/12	3,120 00	3,007 22	543 80	286 96
Johnston, J. H., Chief Clerk, National Revenue	Widow	59	31 6/12	32	3,240 00	2,832 47	906 39	779 66
Kidd, R. N., Dairy Market Reporter, Agriculture	"	46	13	13	1,920 00	1,798 84	233 85	159 61
Kidner, J. H., Cashier and Computing Clerk, National Revenue	"	35	15 9/12	15 9/12	2,040 00	1,838 90	434 43	112 22
Lachance, J. O., Assistant Engineer, Public Works	"	57	21 5/12	21 5/12	2,700 00	2,305 03	691 12	717 08
Lewis, H. B., Excise Statistical, Checker, National Revenue	"	69	21 1/12	20 1/12	2,280 00	1,930 74	399 02	112 62
Littler, N., Customs Appraiser, National Revenue	"	67	17 6/12	16 7/12	3,000 00	2,895 68	480 20	135 52
Maclelland, W. E., District Superintendent, Postal Service, Post Office	"	73	23 9/12	23 9/12	4,620 00	4,506 01	1,070 17	.....
Malcolm, W. J., Lightkeeper, Marine	"	64	14 11/12	14 11/12	716 00	716 00	106 21	114 48
Malone, P. J., Customs-Excise Examiner, National Revenue	"	73	30 5/12	29 11/12	1,740 00	1,688 35	505 10	89 61
Mather, A. P., Cashier and Computing Clerk, National Revenue	"	54	17 1/12	16 10/12	2,040 00	1,757 04	295 77	257 53
Matte, G., Customs-Excise Examiner, National Revenue	"	46	11 4/12	11 4/12	1,740 00	1,670 17	225 48	90 81
Mayer, J. A. A., Departmental Accountant, Grade 2, Post Office	"	58	36 5/12	18 11/12	2,700 00	2,618 49	495 33	.....
McCourt, J. J., Foreman, Char Service, Public Works	"	58	14 3/12	9 2/12	1,260 00	1,177 83	107 97	39 86
McLeod, S., Clerk, Grade 2, Railways and Canals	"	64	23	14 1/12	1,500 00	1,378 70	205 66	198 13
McQuarrie, D. J., Postmaster, Post Office	"	70	14 7/12	14 7/12	3,000 00	2,804 66	490 82	279 48
Milliken, J. B., Office Engineer, Interior	"	61	21 4/12	20 11/12	3,120 00	2,797 71	585 19	.....
Molony, E. P., Cashier and Computing Clerk, National Revenue	"	56	26 1/12	26 1/12	2,040 00	1,967 10	513 09	.....
Monette, T., Postal Clerk, Post Office	"	52	21 11/12	21 11/12	1,740 00	1,658 40	363 47	345 19
Money, E. W., Postal Clerk, Post Office	"	58	16	16	1,740 00	1,575 48	252 08	296 71
Moreau, L. P., Assistant Curator, Reading Room, House of Commons	"	56	27 8/12	25 7/12	1,620 00	1,607 77	616 98	.....
Morris, W. E., Railway Mail Clerk, Post Office	"	47	21 5/12	21 5/12	1,800 00	1,718 00	367 94	352 59
Ogletree, A., Indian Agent, Grade 4, Indian Affairs	"	60	12 2/12	8 2/12	2,080 00	1,978 97	195 91	181 36
Pearce, R., Senior Customs-Excise Examiner, National Revenue	"	39	16 11/12	16 5/12	1,920 00	1,718 74	423 24	184 31
Pouliot, J. J., Mail Porter, Post Office	"	56	13 11/12	13 11/12	1,500 00	1,451 48	282 78	.....
Renaud, J. D. U., Mail Porter, Post Office	"	50	13 1/12	13 1/12	1,500 00	1,448 26	289 65	94 96
Roberge, A., Letter Carrier, Post Office	"	41	19 9/12	19 9/12	1,500 00	1,421 78	280 80	126 06
Roberts, J. H., Inspector of Postal Service, Post Office	"	44	23 7/12	23 7/12	2,700 00	2,306 50	761 53	272 12
Robins, F. J., Postal Clerk, Post Office	"	56	10 5/12	10 5/12	1,740 00	1,585 50	165 16	162 83
Samson, J. E. A., Dockmaster, Public Works	"	54	27 10/12	27 10/12	2,760 00	2,362 06	986 16	424 15
Scarf, W. S., Sr. Inspector, Weights and Measures, Trade and Commerce	"	64	13 8/12	13 8/12	2,040 00	1,740 38	237 85	207 15

Appendix No. 10—Continued

ANNUITIES granted and amounts paid to dependents of employees who died during the year ended March 31, 1929—*Con.*

Name of Contributor and Nature of Service	Dependent's Relationship to contributor	Age at death	Number of years service	Number of years to count	Final annual salary	Average salary	Annual allowance to dependents	Amount paid during the fiscal year
					$ cts.	$ cts.	$ cts.	$ cts.
Sevigny, J. E., Investigation Officer, Immigration and Colonization	Widow	55	16 5/12	11 10/12	1,800 00	1,800 00	255 60	205 90
Southall, F., Railway Mail Clerk, Post Office	"	68	44 7/12	17 8/12	1,800 00	1,767 47	309 31	193 69
Teno, A. C., Senior Customs & Excise Clerk, National Revenue	"	44	18 3/12	18 3/12	2,220 00	1,978 84	541 71	.....
Terry, A. E., Immigration Inspector, Immigration and Colonization	"	59	14 7/12	14 7/12	1,800 00	1,676 68	244 52	.....
Thompson, H., Supt. Dominion Steamers and Life Saving Service, Marine	"	64	19	19	3,540 00	3,340 27	634 65	315 52
Tremblay, J. P., Letter Carrier, Post Office	"	57	15 3/12	15 3/12	1,500 00	1,434 45	217 56	133 93
Trudeau, S., Elevator Operator, Public Works	"	68	15 3/12	8 1/12	1,260 00	1,148 55	92 84	79 54
Villeneuve, A., Caretaker, Public Works	"	70	23 8/12	13 4/12	1,380 00	1,269 83	169 31	141 45
Webster, Geo., Customs Truckman, National Revenue	"	61	18 2/12	18 2/12	1,500 00	1,445 47	267 41	103 23
Wheaton, H. B., Account Clerk, Grade 1, Customs and Excise, National Revenue	"	54	15 10/12	15 10/12	2,640 00	2,454 90	388 70	187 03
Wibberley, J. A., Weighman, Trade and Commerce	"	53	10 11/12	10 11/12	2,460 00	1,842 97	241 41	308 13
Wiles, R. H., Packer and Helper, Post Office	"	65	12 11/12	12 11/12	1,320 00	1,218 06	157 34	109 95
Wilson, R. H., Clerk, Grade 3, Post Office	"	45	21 10/12	21 10/12	1,740 00	1,740 00	379 90	63 30
Wren, J. T., Chief Customs & Excise Clerk, National Revenue	"	61	23 2/12	23 2/12	3,180 00	2,853 16	677 63	.....
Wright, D. I., Computing Clerk, National Revenue	"	42	11 9/12	11 9/12	2,160 00	1,947 37	262 90	.....
Wright, R., Clerk, Customs and Excise, National Revenue	"	70	47	17 6/12	1,740 00	1,705 38	298 44	193 34
							36,264 20	18,555 76

Appendix No. 10—Continued

AMOUNTS paid as Gratuities to Contributors or Dependents of Deceased Employees during the fiscal year ended March 31, 1929

Name of contributor	Department	To whom paid	Amount paid
			$ cts.
Bedard, Albert	National Revenue	Widow	1,396 88
Brayley, H. V.	"	"	716 67
Breton, J. R.	Marine	"	109 16
Caron, Albert	Railways and Canals	Contributor	58 33
Clark, D. A.	Health	Widow	3,347 50
Cochlan, Robert	National Revenue	"	669 17
Corin, D. H.	Post Office	"	458 33
Cox, H. P.	Health	"	2,383 33
Crossley, H. R.	Post Office	Contributor	504 17
Deevy, Wm.	Public Works	Widow	420 00
Desy, P. P.	Indian Affairs	"	180 55
Dickson, James	National Defence	"	1,017 50
Donnelly, James	Public Works	Contributor	506 25
Dufort, Victor	Railways and Canals	"	177 30
Dumontier, Andre	Post Office	"	572 92
Farebrother, A. H.	"	"	1,012 50
Gardner, F. H.	National Revenue	Widow	1,083 31
Golledge, J. B.	Public Works	Contributor	364 17
Green, Geo.	Railways and Canals	Widow	266 66
Hamilton, F. J.	National Revenue	Contributor	1,657 50
Henderson, D. A.	"	"	2,311 05
Howell, Geo.	Post Office	Widow	468 75
Hunter, C. A.	"	"	697 92
Hurst, C. T.	Public Works	Contributor	433 33
Jones, G. S.	Interior	"	403 75
Keating, Michael A.	National Revenue	"	1,275 00
Kennedy, F. G.	Governor General's Secretary Office	Widow	542 45
Lebel, Cirice	National Revenue	Contributor	743 75
Ledger, Beatrice	Post Office	"	560 00
Lobban, Netta J.	Finance	"	137 50
Manuel, D. M.	Interior	"	266 67
McAdam, Andrew	Post Office	"	498 33
McCormack, F. N.	National Revenue	Widow	1,051 25
McKinley, Alex.	Post Office	"	530 00
McLaughlin, Louise	Immigration and Colonization	Contributor	337 50
Mersereau, W. L.	Fisheries	"	947 92
Michaud, Ernest	Justice	"	218 75
Mills, Samuel	National Revenue	Widow	1,184 17
Mulhern, M. E.	Railways and Canals	"	760 00
Munro, W. A.	National Revenue	"	1,510 39
Murphy, W. P.	Public Works	"	451 25
Parker, T. G.	Post Office	Contributor	583 33
Payne, F. C.	National Revenue	Widow	406 25
Ray, John	Post Office	"	652 50
Rutherford, M. S.	National Revenue	"	1,415 49
Sewell, Lemuel F.	"	Contributor	1,000 00
Short, Harold H.	"	Widow	1,804 38
Sinclair, Wm. Alex.	Post Office	Contributor	593 75
Spencer, Verney	"	"	1,020 83
Steele, M. E.	Railways and Canals	"	895 83
Stewart, Robt. McL.	Pensions and National Health	"	2,996 66
Vansickle, Ernest L.	Post Office	"	916 67
Voyer, J. A.	"	Widow	1,027 08
Walker, Joseph B.	"	Contributor	697 92
Welby, Adlard E.	Interior	"	1,605 00
Welland, Walter W.	Railways and Canals	"	583 33
Whatmore, L.	Post Office	Widow	687 50
Whitlock, J. H.	Marine and Fisheries	Contributor	1,312 50
			50,430 95

Appendix No. 10—Continued

Withdrawal Allowances paid to Contributors or Dependents of Deceased Employees during the fiscal year ended March 31, 1929

Name of contributor	Department	To whom paid	Amount paid
			$ cts.
Allen, Thoburn	National Revenue	Contributor	425 22
Asselin, M. L.	Immigration	"	604 78
Atchison, L. M.	Railways and Canals	"	96 00
Atkinson, Gertrude R.	Interior	"	10 30
Babin, G. K.	Post Office	"	922 33
Barrett, M. L.	Mines	"	355 57
Belcher, Margaret Olivia	Interior	"	68 25
Benjamin, Harry	Post Office	"	1,317 27
Black, Elizabeth	Public Works	"	176 00
Barrett, Wm. C.	National Revenue	"	896 45
Botzow, G. S.	Indian Affairs	"	706 78
Bourgeau, Alice M.	Agriculture	"	82 67
Brice, E. W.	Post Office	"	1,063 74
Brickman, Marie L.	"	"	150 00
Broom, Rita M. E.	National Defence	"	58 60
Brosseau, Berthe	Public Works	"	917 83
Browne, Harry	Interior	"	947 39
Bryans, A. C.	Post Office	"	1,153 92
Buisson, C. O'K.	National Revenue	"	933 96
Bullard, A. L.	R. C. M. Police	"	843 05
Burke, Mary M.	National Defence	"	808 58
Calvert, Grace	Agriculture	"	352 69
Campbell, R. M.	Mines	"	598 30
Charron, J. A.	Interior	Mother	1,459 59
Cogswell, John	Post Office	Contributor	978 22
Corno, Frank	National Revenue	"	403 86
Cosh, R. F.	National Defence	"	1,483 33
Couillard, J. Lorenzo	Trade and Commerce	"	624 23
Cowie, Margaret	Pensions	"	485 61
Craig, John	Interior	"	1,619 46
Davie, Maggie M.	National Defence	"	314 23
Davis, Henry	Post Office	"	1,338 32
DeGraves, H. J.	National Revenue	"	1,124 80
Delves, Mary E. M.	Interior	"	652 21
Desrochers, Aline	National Revenue	"	159 91
Doherty, Helen	Interior	"	85 45
Donovan, J. E.	National Revenue	Parents	280 97
Dunstan, Leonard G.	Post Office	Contributor	615 29
Ellis, F. E.	National Revenue	"	1,045 46
Elmore, Blanche	Immigration	"	461 58
Faille, Arthur J.	Post Office	"	927 61
Fawcett, H. G.	Agriculture	"	904 70
Fortune, K.	Civil Service Commission	"	632 52
Fultz, Winnifred F.	Interior	"	211 37
Funnell, Arlene A.	Post Office	"	1,073 17
Furois, M. Y.	"	"	188 27
Gibson, Florence	R.C.M. Police	"	292 45
Goltman, Dorothy	National Defence	"	585 94
Grafton, B. N.	Insurance	"	423 81
Graham, Norman D.	National Revenue	"	2,169 74
Grimes, Mary	Agriculture	"	78 09
Grisdale, Gertrude E.	Post Office	"	226 36
Hannum, Marion N.	Immigration	"	155 31
Harrington, Josephine	Agriculture	"	40 79
Helman, L. Lillian	Post Office	"	61 60
Hickey, Mary	Immigration	"	309 38
Hodgson, Edward St. D.	National Revenue	"	864 65
Howe, Florence G.	Interior	"	78 38
Hudon, Eugenie E.	Post Office	"	551 40
Irwin, George	Marine	"	247 83
Jamieson, Gertrude E.	National Revenue	"	197 04
Jandrew, Catherine E.	Interior	"	369 31
Johnston, Ella T.	Trade and Commerce	"	146 51
Joyce, Anastasia	Immigration	"	168 72
Kenny, C. G.	National Revenue	"	1,025 50
King, A. E.	Post Office	"	1,204 29
Lake, Albert A.	"	"	967 30
Lambert, J. G. N.	Interior	"	456 34
Lantalum, Margaret	Immigration	"	3,915 25
Lapare, C. A.	Post Office	"	201 25

Appendix No. 10—Continued

Withdrawal Allowances paid to Contributors or Dependents of Deceased Employees during the fiscal year ended March 31, 1929—*Concluded*

Name of contributor	Department	To whom paid	Amount paid
			$ cts.
Larmour, B. Alice	National Revenue	Contributor	118 04
Leduc, Louis A.	"	"	1,345 74
Lee, M. J.	"	"	1,541 60
Leger, Mariette	Post Office	"	687 49
Letourneau, Germaine	National Revenue	"	113 60
Loney, Thos. H.	Post Office	"	1,146 91
Lothian, M. M. L.	Immigration	"	169 10
Loucks, Constance H.	Agriculture	"	29 18
Lyle, Janet	Immigration	"	121 45
Macauley, H. D.	Public Works	"	275 50
Manhard, W. E. W.	Post Office	"	1,109 22
McCarthy, Dugal P.	Marine	"	206 88
McDougald, R. B.	National Revenue	"	2,883 41
McGrath, W. N.	Interior	"	732 69
McGregor, J. R.	Indian Affairs	"	826 58
McIllwraith, W. A.	Post Office	"	744 56
McKinney, J. H.	Public Works	"	522 33
McVity, Lucinda	Pensions	"	480 30
McWhirter, Hugh	National Revenue	Brother	480 00
Miller, Walter St. J.	Interior	Contributor	1,069 34
Mitchener, E. H.	Post Office	Mother	113 25
Mulligan, A. A.	Finance	Contributor	110 33
Normoyle, M. M.	Post Office	"	190 68
Norwood, Mary E.	Agriculture	"	84 26
O'Connell, E. J.	Immigration	"	1,393 74
O'Neill, Kathleen M.	Trade and Commerce	"	59 89
Page, Henry	Post Office	"	747 55
Parrish, J. F.	National Revenue	"	1,452 73
Patton, M. J.	Interior	"	1,042 90
Pednault, Romeo	Post Office	"	1,188 69
Peterkin, Martha M.	Public Works	"	1,278 47
Pink, Eleanor R.	Post Office	"	15 51
Pirie, Alex.	Interior	"	1,066 13
Pollock, Jean A.	Agriculture	"	131 73
Presley, Bertha M.	"	"	997 06
Pringle, Robert	Indian Affairs	"	2,141 37
Pyzer, Benjamin	National Revenue	"	1,000 67
Rainboth, Marie	Civil Service Commission	"	164 55
Ranger, Anna, F.	Public Works	"	1,194 82
Robertson, Winnifred	Civil Service Commission	"	679 46
Robson, Gertrude S.	National Defence	"	1,309 79
Rooney, Jos. Louis	Marine and Fisheries	"	447 72
Shrum, Howard	Post Office	"	1,053 26
Slover, Eva	S.C.R.	"	413 88
Somerville, B. B.	Interior	"	106 27
Staples, Esther F.	Post Office	"	785 02
Sullivan, W. H.	Immigration	"	1,274 16
Taggart, Fred	Agriculture	"	541 26
Tanner, G. T.	Post Office	"	1,135 61
Taylor, W. R.	Indian Affairs	"	866 60
Thebarge, Eva	Agriculture	"	30 92
Thomas, Angeline	Post Office	"	828 61
Thomson, Lillian A.	Trade and Commerce	"	206 16
Tomney, Charlotte F.	Pensions and National Health	"	303 24
Tremblay, J. E.	Justice	"	2,218 78
Turner, Lulu	Indian Affairs	"	391 05
Vinette, Mathilda	National Revenue	"	130 41
Warner, Daisy S.	Agriculture	Mother	523 34
Weiler, R. W.	National Revenue	Contributor	1,249 93
Wiles, N. B.	Post Office	"	691 90
Wilson, Margaret J.	National Defence	"	116 68
			89,579 38

Total amount paid as Annuities to Contributors	$ 415,425 84
Total amount paid as Annuities to Dependents	137,284 12
Total amount paid as Gratuities	50,430 95
Total amount paid as Withdrawals	89,579 38
Total Superannuation No. 5	$ 692,720 29

Appendix No. 10—Continued

Civil Servants Widows Annuities Act, 1927

Amounts paid to widows of deceased contributors to Superannuation under part I of the Superannuation and Retirement Act

Widow	Contributor	Department	Annual Allowance	Amount paid during 1928-29
				$ cts.
Adams, Jessie L.	J. F. Adams	National Revenue	200 28	200 28
Aikens, Sarah	Wm. Aikens	Railways and Canals	72 66	72 60
Allen, Jennie	Horace Allen	Post Office	60 00	60 00
Amor, Eliza S.	*W. Amor*	*National Revenue*	*260 65*	
Anderson, Dorothea S.	Wm. P. Anderson	Marine and Fisheries	700 00	699 96
Anderson, Elizabeth	Andrew Anderson	Immigration and Colonization.	83 13	83 04
Archambault, Marie L.	Alfred Archambault	Archives	168 28	154 22
Ardouin, Clara	G. G. V. Ardouin	Labour	346 50	346 44
Arland, Mary Jane	Wm. Hy. Arland	Post Office	315 00	288 75
Armstrong, Dora	B. M. Armstrong	Post Office	720 22	780 13
**Armstrong, Harriet*	*Robert Armstrong*	*Railways and Canals*	*111 78*	*179 11*
Ashton, Lucy Ann	Alfred E. Ashton	Post Office	158 34	158 28
Atcheson, Ada	A. Atcheson	National Defence	173 25	173 16
Atkins, Martha J.	Wm. Atkins	National Revenue	333 68	333 60
Atwood, Julia	W. W. Atwood	National Revenue	140 00	139 92
Aumond, Leda P.	Telmond Aumond	Secretary of State	208 12	208 08
Aumond, Mary Eliz.	Wm. Hy. Aumond	National Defence	330 31	330 24
Austin, Agnes	*J. J. Austin*	*Post Office*	*125 84*	*236 87*
Austin, Clara	T. B. S. Austin	Post Office	120 00	120 00
Austin, Mary J.	Wm. A. Austin	Indian Affairs	126 00	126 00
Avery, Margaret	Wm. R. Avery	Post Office	262 50	262 44
Bacon, Ellen F.	Thos. Bacon	National Defence	126 00	126 00
Balcom, May Jane	J. H. Balcom	Finance	332 50	332 40
Barber, Charlotte V.	Edward C. Barber	Auditor General's Office	306 24	306 24
Barber, Elizabeth	Ben F. Barber	Post Office	134 75	134 64
*Barber, Jane E.	John S. Barber	National Revenue	225 48	188 57
Bare, Catherine	A. Bare	Railways and Canals	46 62	50 44
Barker, Annie L.	R. W. Barker	Post Office	455 00	454 92
Barnett, Laura	John Barnett	National Revenue	168 75	168 72
Barrett, Annie	Jas. Barrett	Post Office	280 00	279 96
*Bartlett, Ida L.	J. H. Bartlett	Finance	156 00	104 00
Barton, Julia E.	W. H. Barton	National Revenue	46 46	46 44
Bartram, Janet	Jos. Thos. Bartram	National Revenue	245 00	244 92
Bascom, Elizabeth A.	Benj. Bascom	Post Office	132 00	132 00
Bate, Beatrice N.	Chas. W. C. Bate	Agriculture	500 72	458 92
Battle, Katherine M.	*Timothy Battle*	*Railways and Canals*	*69 76*	*136 96*
Battle, Rachel Eliz.	John Battle	National Revenue	131 75	131 64
Bayard, Annie E.	Gilbert A. Bayard	National Revenue	266 73	266 64
Beatty, Margaret L.	W. J. Beatty	Post Office	375 88	375 84
Beauchesne, Caroline	P. C. Beauchesne	National Revenue	175 00	174 96
Beaudoin, Philomene	Jos. Beaudoin	Interior	70 58	70 56
*Beaulieu, Rose Alba	Arthur H. Beaulieu	Printing and Stationery	85 00	92 04
Beckwith, Cordelia R.	Robert Nelson Beckwith	National Revenue	217 50	217 44
Belair, Victoria L.	A. P. Belair	National Revenue	139 38	139 32
Belleau, Elise L.	Narcisse L. S. Belleau	National Revenue	69 79	69 72
Belliveau, Genevieve	A. H. Belliveau	Marine and Fisheries	301 60	301 56
Belton, Margaret K.	F. S. Belton	National Revenue	212 50	212 40
Belyea, Maria L.	Theodore H. Belyea	National Revenue	392 19	392 16
Bennett, Katherine E.	Fred G. Bennett	National Revenue	472 24	472 20
Bennett, Mary Alice	John Bennett	Finance	164 33	164 28
Bennetts, Minnie	Francis K. Bennetts	Privy Council	676 40	676 32
Bender, Eva Alma	Hiram Bender	National Revenue	112 98	112 92
Benson, Alice Maud	Martin Benson	Indian Affairs	438 96	438 96
Berney, Elizabeth	Thos. Berney	Post Office	204 14	204 12
Bickle, Charlotte H.	John W. Bickle	Interior	219 19	219 12
Bill, Margaret A.	Caleb R. Bill	National Revenue	101 85	101 76
Billings, Charlotte E.	Braddish Billings	Interior	55 00	59 54
Bilodeau, Rebecca	Edmond Bilodeau	Post Office	185 84	185 76
Birtch, Margaret H.	*C. S. Birtch*	*Trade and Commerce*	*203 90*	*400 41*
Blair, Rebecca	William Blair	Post Office	186 00	186 00
Blais, Elzire B.	J. C. Blais	Public Works	111 10	111 00
Blamey, Marion J.	George F. Blamey	National Revenue	179 63	179 52
Blanchard, Isabella M.	Wm. M. K. Blanchard	Post Office	86 25	86 16

Appendix No. 10—Continued

Civil Servants Widows Annuities Act, 1927—*Continued*

Amounts paid to widows of deceased contributors to Superannuation under part I of the Superannuation and Retirement Act—*Continued*

Widow	Contributor	Department	Annual Allowance	Amount paid during 1928-29
			$ cts.	$ cts.
Blethen, Clara Belle	Chas. W. Blethen	National Revenue	294 00	294 00
Boivin, Josephine V	Charles A. Boivin	National Revenue	160 00	159 96
Boneberg, Caroline D	E. W. Boneberg	Railways and Canals	27 95	27 84
Bonnick, Sarah C	Wm. Bonnick	Post Office	260 07	260 04
Botterell, Annie	Hy. A. Botterell	House of Commons	101 46	101 40
Botterell, Mary L	Edward Botterell	House of Commons	420 00	420 00
Boulanger, Caroline	Arthur Boulanger	Public Works	40 38	40 32
Boulet, Blanche T	Albert Boulet	Post Office	280 00	279 96
Bourgeois, Emma	*Jos. Bourgeois*	*Post Office*	*69 00*	*19 84*
Bourinot, Isabelle	Sir John G. Bourinot	House of Commons	561 00	561 00
*Bourret, Alexandrina	Hormidas A. Bourret	Post Office	262 50	210 23
Bourret, Sara D	E. A. Bourret	National Revenue	175 00	174 96
Bown, Eliza P	T. S. Bown	National Revenue	182 03	197 08
Boyle, Mary Agnes	Patrick Boyle	National Revenue	157 40	104 88
Bradley, Margaret	Casper W. Bradley	Railways and Canals	78 43	91 42
Brennan, Elizabeth	John Brennan	National Revenue	329 00	328 92
Brennan, Jessie	Thos. Brennan	Post Office	115 38	115 32
Brennan, Margaret F	Pat. F. Brennan	Post Office	158 18	158 16
Brenot, Delphine	Honore Brenot	Post Office	222 28	222 24
*Briggs, Johanna	John Briggs	Post Office	240 00	143 33
Brittain, Dora Joyce	Alfred Brittain	Post Office	56 00	55 92
*Brittain, Ellen W	Joseph Brittain	National Revenue	96 95	22 59
Brophy, Elizabeth M	Geo. P. Brophy	Public Works	525 00	525 00
Brophy, Fannie L	*Wm. M. Brophy*	*Finance*	*171 60*	*117 62*
Browne, Sarah Alice	Alfred Browne	Post Office	210 00	210 00
Budge, Phoebe	*Benjamin Budge*	*Post Office*	*170 13*	*333 93*
Buist, Amelia E	Andrew Buist	National Revenue	57 00	57 00
Bunel, Isabel E	Edmond L. Bunel	Post Office	154 11	154 08
Bunting, Jane	Chas. E. Bunting	National Revenue	72 00	72 00
Burke, Bridget	Timothy Burke	National Revenue	365 25	365 16
Byers, Mary Agnes	Henry Byers	National Revenue	294 97	294 96
Byrnes, Honorah	John Byrnes	Trade and Commerce	509 62	509 52
Cairns, Annie	Wm. Cairns	House of Commons	461 44	461 40
Cairns, Minnie Eliz	Thos. A. Cairns	Post Office	437 50	437 40
Cameron, Lucy O	Donald M. Cameron	National Revenue	280 00	279 96
Campbell, Constance	J. M. Campbell	Post Office	245 00	244 92
Campbell, Marie E	John Campbell	Post Office	88 08	88 08
Campeau, M. Adeline	F. R. E. Campeau	National Revenue	503 61	503 52
Carleton, Isabella	John Carleton	Senate	280 00	279 96
Carleton, Julia	Robert Carleton	National Revenue	156 75	156 72
Carroll, Maria	Daniel Carroll	National Revenue	257 38	257 28
Carter, Amy J. T	Chas. H. Carter	Railways and Canals	76 50	76 44
Carter, Bella Phebe	James Carter	Post Office	210 00	210 00
Casault, Esther A	Louis J. Casault	Library of Parliament	210 00	210 00
Casgrain, Catherine	H. Casgrain	Agriculture	288 00	288 00
Cassells, Emma	Robert Cassells	Justice	352 00	351 96
Chadd, Ida	Geo. J. Chadd	National Revenue	22 00	
Chalmers, Elizabeth	Robert Chalmers	Mines	208 82	208 80
Chesley, Mary Stuart	H. N. P. Chesley	National Defence	490 00	489 96
Chilton, Jemima	J. P. Chilton	Post Office	186 92	186 84
Clappison, Mary	Thos. Clappison	National Revenue	280 00	279 96
Clark, Amelia E	Jas. A. Clark	National Revenue	158 97	158 88
Clark, Bertha	Jas. S. Clark	Post Office	189 00	189 00
Clarke, Margaret M	Patrick Clarke	Post Office	90 00	90 00
Clark, Sarah M	*J. C. Clark*	*Post Office*	*92 00*	*180 60*
Clarkin, Annie	John T. Clarkin	Post Office	105 22	105 12
Claude, Rachel A	Benjamin Claude	Marine and Fisheries	70 00	69 96
Clayton, Clara M	Frank Clayton	Interior	279 00	279 00
Clewes, Charlotte E	John R. Clewes	Post Office	55 69	55 68
Clinch, Eleanor T	C. Clinch	National Revenue	56 00	51 26
Coburn, Florence H	Alex. H. J. Coburn	Post Office	238 00	218 13
Codd, Katherine F	H. J. Codd	National Revenue	144 07	144 00
Code, Helen C	Thos. J. Code	Trade and Commerce	748 86	748 80
Coffin, Jessie May	Frederick Coffin	Finance	344 14	344 04

Appendix No. 10—Continued

Civil Servants Widows Annuities Act, 1927—*Continued*

Amounts paid to widows of deceased contributors to Superannuation under part I of the Superannuation and Retirement Act—*Continued*

Widow	Contributor	Department	Annual Allowance	Amount paid during 1928-29
				$ cts.
Coldwell, Emily Mary	Aubrey B. Coldwell	National Revenue	216 67	216 60
Colette, Rosalie	Jacques Colette	Railways and Canals	84 63	84 60
Collier, Ellen E.	Chas. H. Collier	Railways and Canals	82 76	
Colson, Elizabeth F.	Frederick Colson	Secretary of State	586 25	586 25
Connolly, Margaret	Peter Connolly	House of Commons	280 00	279 96
Corbeil, Seraphine	Jos. Z. Corbeil	National Revenue	532 25	532 20
Corbett, Sarah G.	Howard Corbett	National Revenue	32 50	40 50
Costley, Charlotte M.	A. Costley	Post Office	425 00	424 92
Cote, Elmina	Pierre M. Cote	Justice	700 00	699 96
Cote, Julia	Jos. A. Cote	Interior	660 00	605 00
Courtney, Adelaide M.	J. J. Courtney	National Revenue	210 12	210 12
Courtney, Mary E. S.	J. M. Courtney	Finance	875 00	874 92
Cousins, Florence J.	Hugh T. Cousins	Post Office	208 18	208 08
Crawford, Elizabeth	John Crawford	Post Office	252 00	252 00
Crawford, Isabella A.	S. Crawford	National Revenue	239 95	239 88
Crocker, Victoria A.	Wm. Crocker	Post Office	204 00	204 00
Culhane, Margaret	Patrick Culhane	National Revenue	97 50	81 20
Cullis, Ada Eliza	Wm. Cullis	Marine and Fisheries	51 75	51 72
Culross, Christina	Charles Culross	Post Office	88 98	88 92
Dalton, Catherine J.	James Dalton	House of Commons	490 00	489 96
Dalton, Margaret J.	Robert G. Dalton	Indian Affairs	297 50	297 48
Damery, Abbie J.	*Thos. J. Damery*	*Post Office*	*40 60*	*76 31*
Daoust, M. E. L.	Joseph A. Daoust	Trade and Commerce	264 83	264 72
D'Auray, Clarisse	Louis D'Auray	Agriculture	238 77	238 68
Daveluy, Marie Ann	Georges Daveluy	National Revenue	72 00	72 00
Davis, Alice M.	John C. Davis	National Revenue	158 30	158 28
Davis, Flora B.	Rupert G. Davis	Justice	232 00	231 96
Davis, Frances Julia	John Davis	Interior	490 00	326 64
Davison, Lucille D.	Thos. E. Davison	Finance	202 67	202 56
Dawson, Maria	Francis Dawson	Railways and Canals	23 21	23 16
DeCelles, Marie E.	A. D. DeCelles	Library of Parliament	943 06	942 96
Demare, Elva L.	J. G. Demare	National Revenue	170 10	170 04
*Dench, Katherine	Thos. Q. Dench	National Revenue	130 00	32 47
Denneny, Jane	Jas. Denneny	Railways and Canals	116 90	116 88
D'Entrement, Frances	J. A. D'Entrement	National Revenue	48 00	36 00
Dickieson, Harriet	M. G. Dickieson	Finance	336 00	336 00
*Dionne, Marie H.	Ernest Dionne	Public Works	196 62	
Dixon, Margaret M.	Frederick A. Dixon	Railways and Canals	591 18	591 12
Dobbin, Margaret	W. L. Dobbin	National Revenue	257 54	236 06
Donaldson, Mary E.	J. R. Donaldson	Post Office	257 40	257 40
Dorman, Jane H.	W. H. Dorman	Post Office	280 00	279 96
Douglas, Emily	Peter B. Douglas	Interior	134 18	134 16
Doyle, Mary R.	Jas. J. Doyle	Post Office	139 20	139 20
Doyon, F. M.	J. A. Doyon	National Revenue	490 00	489 96
Driscoll, Sarah A.	James Driscoll	Railways and Canals	28 25	28 20
Drouillard, Genevieve	Albert Drouillard	National Revenue	205 92	223 08
Drouin, Cedulie	Alphonse Drouin	Secretary of State	399 00	399 00
Dubé, Rose A.	L. J. A. Dubé	Secretary of State	236 57	236 52
Dubé, Victoire	Lucien Dubé	House of Commons	350 00	349 92
Dufresne, Lucie L.	F. A. Dufresne	Post Office	185 94	185 88
Dufresne, Mary A.	L. F. Dufresne	Finance	159 45	106 24
Duggan, Annie	*E. J. Duggan*	*House of Commons*	*436 00*	*67 47*
*Dumouchel, Clara	L. A. Dumouchel	National Revenue	247 14	92 99
Dundas, Christiana L.	*Jas. Dundas*	*Finance*	*163 20*	*320 50*
Dunlop, Sarah	Jas. H. Dunlop	Library of Parliament	140 00	139 92
Dunne, Louise P.	John P. Dunne	National Revenue	176 67	191 36
Dunnett, Charlotte E.	E. H. Dunnett	Post Office	313 06	312 96
Dupont-Hebert, C. B.	Chas. Dupont-Hebert	National Revenue	272 00	271 92
Eckersley, Georgia Roe	*John Eckersley*	*National Revenue*	*238 00*	*49 25*
Edgar, Margaret	Wm. Edgar	Post Office	244 13	244 08
Egener, Louise I.	A. Egener	National Revenue	262 50	262 44
Elliott, Margaret	James H. Elliott	Post Office	105 39	105 36
Ellis, Agnes	Geo. Ellis	Post Office	272 00	271 92
Ellis, Mary A. A.	Wm. Ellis	Railways and Canals	246 50	225 94

Appendix No. 10—Continued

Civil Servants Widows Annuities Act, 1927—*Continued*

Amounts paid to widows of deceased contributors to Superannuation under part I of the Superannuation and Retirement Act—*Continued*

Widow	Contributor	Department	Annual Allowance	Amount paid during 1928-29
				$ cts.
Embury, Ida May	J. Embury	Post Office	51 13	51 12
Erwin, Rhoda	Walter Erwin	Marine and Fisheries	101 50	101 40
Evans, Kate D	Albert H. Evans	Post Office	198 59	198 48
Fawcett, Myra	Edgar Fawcett	National Revenue	168 75	168 72
Fearnside, Ida J	J. H. Fearnside	Post Office	207 72	190 41
Fenerty, Louise M	*Arthur Fenerty*	*Finance*	*224 25*	*111 47*
Ferguson, Ann E	Wm. Ferguson	Post Office	227 50	227 40
Fergusson, Melanie A	R. C. Fergusson	Post Office	256 63	256 56
Firth, Alicia	Charles M. Firth	Marine and Fisheries	61 63	56 43
Fleming, Mary	*Alexander Fleming*	*National Revenue*	*37 50*	*73 58*
Fletcher, Sarah	E. H. Fletcher	Post Office	693 88	693 84
Flinn, Margaret	Wm. Flinn	Post Office	156 51	156 48
Foley, Mary E	Jas. G. Foley	Privy Council	598 12	598 08
Forest, Rose D	Eugene Forest	National Revenue	301 20	301 20
Fortier, Cecile G	J. J. O. Fortier	National Revenue	132 59	132 48
Fortier, Sephronie	Theo. Fortier	Public Works	351 82	351 72
Foster, Blanche	Geo. L. Foster	Justice	252 00	252 00
Foster, Margaret	Alfred Foster	Railways and Canals	101 06	101 04
Fox, Mary A	Thomas Fox	National Revenue	262 13	262 08
Franck, Leda	Raphael Franck	Post Office	112 68	112 68
Fraser, Angeline	L. C. Fraser	Post Office	334 01	333 96
Fraser, Jennie	J. R. Fraser	Post Office	205 00	204 96
Fraser, Mary J	John Fraser	Auditor General	875 00	874 92
Frechette, Annie H	Achille Frechette	House of Commons	488 06	447 37
Frechette, Elizabeth	G. Frechette	Post Office	95 00	94 92
Freeman, Mary E	N. P. Freeman	National Revenue	157 50	157 44
Friers, Sarah A	John Friers	Post Office	191 33	191 28
Frigon, Leocadie P	H. M. A. Frigon	Post Office	163 30	163 20
Frost, Martha	S. L. T. Frost	National Revenue	412 77	412 68
Fulton, Mary	Robert Fulton	National Revenue	66 00	60 50
Gagnon, Emma	S. Gagnon	R.C.M.P.	189 00	189 00
Gariepy, Marie A	J. B. Gariepy	Post Office	86 00	85 92
Garland, Katherine	N. S. Garland	Finance	266 47	266 40
*Garrison Elizabeth	W. A. Garrison	National Revenue	262 50	96 65
Gass, Blanche E	*Wm. Hy. Gass*	*Finance*	*245 00*	*124 50*
Gaudin, Agnes	J. Gaudin	Marine and Fisheries	185 55	185 52
Gaudry, A. L	B. T. Gaudry	Post Office	199 61	199 56
Genest, Rose	*J. A. Genest*	*Post Office*	*184 00*	*214 66*
Gerald, Alice M	A. S. Gerald	National Revenue	105 00	96 25
Gerald, Elizabeth H	W. J. Gerald	National Revenue	875 00	874 92
Gerald, Lizzie	W. H. Gerald	National Revenue	374 00	373 92
Gill, Eliza A	Wm. Hy. Gill	Post Office	240 00	240 00
Gill, Isabella	*Wm. Gill*	*Interior*	*437 50*	*859 00*
Gillie, Mary	John Gillie	Railways and Canals	88 59	88 56
Gingras, Marie P	J. F. Gingras	House of Commons	289 00	288 96
Giroux, Mary	O. J. Giroux	National Revenue	245 00	244 92
*Giroux, Sophie	Joseph Giroux	Post Office	140 39	47 51
*Gleeson, Anna	Jas. Gleeson	Railways and Canals	48 24	32 16
Glover, Frances	*John E. Glover*	*Railways and Canals*	*85 70*	*17 27*
Godson, Mary M	Ernest Godson	Post Office	164 67	164 64
Goodeve, Chloe E	W. M. Goodeve	Interior	430 21	466 05
Gouin, Adelaide	Jas. A. Gouin	Post Office	700 00	699 96
Gouin, Erilie M	Chas. Gouin	National Revenue	210 00	210 00
*Gould, Mary E	T. D. Gould	Post Office	217 00	216 96
*Gourdeau, Clara	F. Gourdeau	Marine and Fisheries	700 00	519 33
Grafton, Mary	W. H. Grafton	National Revenue	224 00	223 92
Greaves, Marie Z	Walter Greaves	Post Office	366 26	366 24
Greenfield, Eliza	J. R. M. Greenfield	Post Office	593 18	593 16
Guerin, Aurore C	L. J. Guerin	National Revenue	198 84	198 84
Hagarty, Henrietta	H. B. Hagarty	National Revenue	270 60	270 60
Hagerman, Alvina V	J. G. Hagerman	National Revenue	186 94	186 84
Halkett, Isabel	J. B. Halkett	Marine and Fisheries	476 88	476 88
Hall, Beatrice	Chas. R. Hall	National Revenue	189 00	189 00
Hall, Elsie M	Jno. P. Hall	Post Office	271 01	270 96

Appendix No. 10—Continued

Civil Servants Widows Annuities Act 1927—*Continued*

Amounts paid to widows of deceased contributors to Superannuation under part I of the Superannuation and Retirement Act—*Continued*

Widow	Contributor	Department	Annual Allowance	Amount paid during 1928-29
				$ cts.
Hall, Oriessa	*Jas. M. Hall*	*Post Office*	*267 58*	*525 40*
Hamilton, Mary	Andrew Hamilton	Railways and Canals	122 40	122 40
Harding, Ida K	F. H. Harding	Marine and Fisheries	315 00	315 00
Harney, Mary	Thos. Harney	National Revenue	262 50	262 44
Harrington, Florence	W. H. Harrington	Post Office	616 88	616 80
Harris, Emma J	H. J. Harris	Post Office	33 20	33 12
Harron, M. E	R. J. Harron	Post Office	135 82	135 72
Hassard, Eva F	Richard Hassard	Post Office	397 45	397 44
Haszard, Annie W	T. W. D. Haszard	Post Office	245 00	244 92
Hatch, Caroline	Walter Hatch	Interior	94 88	94 80
Hayes, Emily C	Edwin C. Hayes	Auditor General	472 50	472 44
Heath, Christina	Daniel Heath	Railways and Canals	32 25	32 16
Henderson, Charlotte A	James Henderson	Post Office	458 88	458 88
Henry, Jane	J. R. Henry	National Revenue	57 19	57 12
Herchmer, Ethel J	*L. W. Herchmer*	*R.C.M.P*	*286 00*	*561 63*
Herst, Dinah	Samuel Herst	Post Office	72 00	66 00
Hicks, Lessie A	Amos Hicks	Post Office	396 67	396 60
Hill, Almina A	Arthur M. Hill	National Revenue	173 33	173 28
Hilton, Frances P	Geo. W. Hilton	Post Office	147 72	135 41
Hiscott, Frances S	Wm. C. Hiscott	Post Office	282 66	282 60
Hobbs, Agnes	G. N. Hobbs	National Revenue	178 63	178 56
Holder, Lillie J	Geo. W. Holder	House of Commons	175 00	174 96
Howe, Margaret C	G. J. Howe	Railways and Canals	148 28	148 20
*Hoyt, Rebecca A	J. W. Hoyt	National Revenue	216 00	138 60
Hudson, Kate A	A. B. Hudson	Auditor General	400 00	399 96
Hunt, Bessie	Geo. A. Hunt	Post Office	211 61	211 56
Hurley, Annie	Robert Hurley	Railways and Canals	103 34	94 71
Hyatt, Mary E	F. F. Hyatt	Post Office	450 86	450 84
*Hyslop, Henrietta I	Sam. N. Hyslop	National Revenue	73 50	64 26
Ironside, Caroline	Geo. A. Ironside	National Revenue	194 25	194 16
James, Sophia	W. H. James	Post Office	69 00	69 00
Jarvis, Ethel C	E. F. Jarvis	National Defence	758 33	758 28
Jenkins, Susan J	Geo. Jenkins	National Revenue	141 63	153 40
Jessop, Mary S	W. G. Jessop	Post Office	184 40	184 32
Johnson, Christina	Jos. Johnson	Post Office	315 00	315 00
Johnstone, Jane L	Geo. E. Johnstone	National Revenue	143 52	155 48
Joule, Ellen	A. J. Joule	National Revenue	95 00	87 01
Keating, Laura M	M. E. Keating	National Revenue	174 86	174 84
Keeler, Eliza A	Geo. S. Keeler	National Revenue	144 14	144 12
Keith, Georgie	Jas. T. Keith	Post Office	315 00	315 00
Kelly, Margaret	Mathew D. Kelly	Marine and Fisheries	173 33	173 28
Kennedy, Maude A	Robert D. Kennedy	National Revenue	315 00	315 00
Kent, Susan C	*S. B. Kent*	*Marine and Fisheries*	*487 08*	*606 23*
Keyes, Helen	James Keyes	Railways and Canals	41 76	41 76
King, Augusta F	Wm. F. King	Interior	666 11	666 00
Kinloch, Emily G	Henry Kinloch	Interior	154 24	154 20
*Klotz, Marie C	Otto J. Klotz	Interior	865 97	577 28
Knauff, Henrietta	Henry Knauff	Post Office	179 61	164 56
Kreps, Rose Ann	Wm. H. Kreps	Post Office	280 00	279 96
Lacasse, Lioza M	Louis T. Lacasse	Interior	110 00	109 92
Lafontaine, Eugenie	A. M. Lafontaine	National Defence	155 91	155 88
Laframboise, Alphonsine	L. J. M. Laframboise	House of Commons	560 97	560 88
Lagace, Melvina	Philippe Legace	Post Office	84 00	84 00
Lally, Annie	P. J. Lally	Post Office	168 71	168 60
Lambe, Mabel M	L. M. Lambe	Mines	594 13	544 61
Laporte, Clara L	Geo. Laporte	National Revenue	204 00	204 00
Larochelle, Flora	Norbert Larochelle	Printing and Stationery	287 35	287 28
Larue, Marie E. C	E. P. Larue	National Revenue	245 00	244 92
Latouche, Anna	A. Latouche	National Revenue	202 92	202 92
Laurin, Marie E	A. Laurin	National Revenue	202 67	202 56
Lawlor, Elizabeth	R. A. Lawlor	National Revenue	105 00	96 25
Leblanc, Azilda	Pierre Leblanc	Railways and Canals	88 55	88 44
Lee, Frances A. R	H. P. Lee	Post Office	174 66	174 60
Lee, Sarah Ann	Ed. Lee	National Revenue	251 81	251 76

Appendix No. 10—Continued

Civil Servants Widows Annuities Act, 1927—*Continued*

Amounts paid to widows of deceased contributors to Superannuation under part I of the Superannuation and Retirement Act—*Continued*

Widow	Contributor	Department	Annual Allowance	Amount paid during 1928-29
				$ cts.
Lefebvre, Alphonsine	G. Lefebvre	Post Office	255 21	255 12
Legendre, Letitia	J. B. Z. Legendre	Post Office	198 00	198 00
Leggett, Mary A.	John E. Leggett	Railways and Canals	140 00	139 92
Lelacheur, Sarah J.	C. P. Lelacheur	National Revenue	42 00	42 00
Lemieux, Emma E.	E. E. Lemieux	National Defence	502 67	502 56
Lemieux, J. A.	G. Lemieux	Interior	282 78	282 72
Lepage, Alphonsine	Victor Lepage	Public Works	116 00	115 92
Leslie, Margaret	John Leslie	Justice	491 46	491 40
Lesueur, Lottie A.	Chas. P. Lesueur	Post Office	437 50	437 40
Letson, Lucretia M.	E. E. Letson	National Revenue	60 00	60 00
Levasseur, P. V.	Naz. Levasseur	Interior	228 47	209 44
Lewis, Evelyn C.	R. A. Lewis	Trade and Commerce	344 33	344 28
Lewis, Mary	J. H. Lewis	Post Office	513 62	513 60
Little, Christina M.	H. R. Little	Post Office	129 50	129 48
Lloyd, Ellen	*F. E. Lloyd*	*National Revenue*	*92 90*	*17 97*
Lord, Margaret	A. Lord	Marine and Fisheries	388 64	388 56
Losey, Susan	T. Losey	National Revenue	122 31	122 28
*Loucks, Cecilia	H. H. Loucks	House of Commons	176 00	24 43
Lowe, Ella	W. H. Lowe	National Revenue	101 85	93 28
Lowry, Sarah E. M.	John Lowry	National Revenue	87 00	87 00
Loyer, Eglophire	F. Loyer	Interior	325 65	325 56
Lynch, Charlotte M.	Walter Lynch	National Revenue	116 00	106 26
Lyons, Helen	Jno. M. Lyons	Railways and Canals	403 00	402 96
Macarow, Mary E.	P. H. Macarow	Post Office	315 00	315 00
Macauley, Mary E.	D. D. Macauley	Post Office	187 20	187 20
Macdonald, Annie	C. J. Macdonald	Post Office	312 00	312 00
Macdonald, Clara A.	A. B. Macdonald	National Revenue	363 00	363 00
Macdonald, Isabella	Dugald Macdonald	National Revenue	225 00	225 00
Macdonell, Ada M.	H. P. Macdonell	House of Commons	296 44	296 40
Macfarlane, Margaret	Thos. Macfarlane	National Revenue	315 00	315 00
Mackenzie, Grace A.	Arch. Mackenzie	National Revenue	238 00	237 96
Macleod, Eliz. Susan	Alex. D. Macleod	National Revenue	140 19	140 16
Macpherson, Annie C.	John Macpherson	National Defence	375 00	375 00
Macpherson, Ellen	Wm. Macpherson	Post Office	315 00	315 00
Macrae, Rachel A.	Jas. A. Macrae	Indian Affairs	297 50	297 48
Madore, Marie H.	J. A. Madore	Post Office	315 00	315 00
Mahon, Mary	Martin J. Mahon	Post Office	367 50	367 44
Maingy, Ann Maria	L. A. Maingy	Post Office	447 71	447 60
Malepart, Elizabeth	Geo. S. Malepart	Justice	525 48	525 48
Mankey, Mary W.	Wm. J. Mankey	Post Office	146 56	146 52
Marentette, Susan	Alex. Marentette	Trade and Commerce	149 85	149 76
Marks, Emily E.	John Marks	Finance	69 00	69 00
Marquette, Eliz. J.	L. F. Marquette	Post Office	203 72	203 64
Martin, Antoinette	R. P. Martin	National Revenue	212 38	212 28
Martin, Nora E.	C. W. Martin	Post Office	302 17	302 16
Martineau, Marie H.	F. R. Martineau	Post Office	208 00	207 96
Matheson, Agnes	John Matheson	National Revenue	91 60	91 56
Matthews, Marie E.	Geo. Matthews	Finance	126 04	126 00
Matthews, Sarah A.	John Matthews	National Revenue	55 25	55 20
May, Christina	G. M. May	National Revenue	162 00	162 00
Medlow, Catherine	Charles Medlow	Secretary of State	95 00	87 01
Miller, Agnes B.	Hy. J. Miller	Interior	70 00	75 79
Miller, Matilda	Robt. S. Miller	Post Office	247 48	247 44
Milligan, Lena P.	W. G. Milligan	Post Office	458 03	457 92
Milliken, Bessie	Edwin Milliken	National Revenue	227 50	94 75
Moerschfelder, Jane	Jacob Moerschfelder	Post Office	415 92	415 92
Moffatt, Eliz. Ann	Thos. P. Moffatt	Indian Affairs	151 64	151 56
Morgan, Margaret	*James A. Morgan*	*Post Office*	*80 90*	*158 85*
Monaghan, Minnie	John Monaghan	Post Office	168 00	154 00
Monkman, Eliz. E.	A. H. Monkman	Post Office	116 73	116 64
Morin, Alice R.	A. E. Morin	Post Office	288 17	288 12
Morin, Marie	Jules Morin	Marine and Fisheries	113 58	113 52
Murray, Flora	Alex. Murray	Post Office	222 22	222 12
McAdoo, Annie	R. J. McAdoo	National Revenue	153 92	153 84

Appendix No. 10—Continued

Civil Servants Widows Annuities Act, 1927—*Continued*

Amounts paid to widows of deceased contributors to Superannuation under part I of the Superannuation and Retirement Act—*Continued*

Widow	Contributor	Department	Annual Allowance	Amount paid during 1928-29
				$ cts.
McAllister, Mary	Daniel McAllister	National Revenue	68 00	67 92
*McBeath, Lowell E	Allan McBeath	National Revenue	132 00	11 00
McCarthy, Mary L	Dennis F. McCarthy	Post Office	280 00	279 96
McCloskey, Bridget	J. R. McCloskey	National Revenue	198 01	198 00
McCord, Harline	F. A. McCord	House of Commons	416 25	416 16
McCoy, Anna C	Wm. McCoy	National Revenue	223 03	222 96
McDonald, Catherine	John McDonald	Justice	240 00	240 00
*McDonald, Jessie A	Dan McDonald	National Revenue	162 00	149 37
McDonald, Johanna	Jas. J. McDonald	National Revenue	46 56	46 56
McDonald, Mary C	J. F. McDonald	National Revenue	350 00	349 92
*McDougall, Marion E	John L. McDougall	Auditor General	540 00	69 67
McElhinney, E. F	M. P. McElhinney	Marine and Fisheries	247 72	247 68
McFarlane, Katherine	Jas. D. C. McFarlane	Post Office	149 44	149 40
McGee, Elizabeth	John Jos. McGee	Privy Council	560 00	559 92
McGie, Clara E	D. B. McGie	National Revenue	70 00	52 47
McGinnis, Jane A	Arthur McGinnis	National Revenue	236 41	236 40
McGirr, Jane	John McGirr	Indian Affairs	367 50	367 44
McGuire, Etna	Horace McGuire	Post Office	549 61	549 60
McInnis, Emma	J. L. McInnis	National Revenue	72 25	72 24
McIntyre, Lizzie	C. C. McIntyre	Finance	186 00	139 50
McKay, Annie E	Hiram McKay	Indian Affairs	471 43	471 36
McKay, Ellen	James McKay	National Revenue	118 71	29 67
McKay, Frances Jane	Samuel McKay	National Revenue	40 80	27 20
McKenna, C. A	W. G. McKenna	Post Office	63 00	63 00
McKenna, Mary	J. A. J. McKenna	Indian Affairs	390 00	357 50
McKenna, Mary S	W. J. McKenna	National Revenue	411 55	411 48
McKiel, Mary O	C. E. McKiel	National Revenue	241 87	282 10
McLagan, D	*John McLagan*	*National Revenue*	*218 75*	*223 34*
McLennan, E. A	A. McLennan	Post Office	189 00	189 00
McLeod, M. E	W. W. McLeod	Post Office	485 63	485 52
McMinn, Caroline	W. J. R. McMinn	Finance	112 00	111 96
McMullan, Dorothy	H. J. McMullan	Post Office	183 21	183 12
McNamara, Gertrude	M. McNamara	National Revenue	149 19	149 16
*McQuarrie, Catherine	T. B. McQuarrie	National Revenue	12 31	4 01
Nelson, Ermina	Frank Nelson	Interior	504 00	504 00
Nelson, Jessie	Robert Nelson	Post Office	232 30	232 20
Nevens, Alice M	J. Jas. Nevens	Post Office	131 44	131 40
Newall, Mary E	W. J. Newall	Post Office	60 00	40 00
Newsome, Charlotte	W. A. Newsome	Railways and Canals	145 83	145 80
Nicholson, Georgina	James Nicholson	Post Office	114 56	124 02
Noble, Margaret	W. H. Noble	Marine and Fisheries	183 85	183 84
Norcross, Mary L	A. A. Norcross	Post Office	377 40	408 85
Norris, Gertrude	Jas. G. Norris	Post Office	315 00	315 00
Northrop, Marilla	B. M. Northrop	Post Office	703 94	703 92
Nutting, Claire	Jas. P. Nutting	Trade and Commerce	236 13	236 04
O'Brien, Harriet	J. F. O'Brien	National Revenue	380 69	380 64
Odell, Elizabeth L	Henry Odell	National Revenue	78 90	78 84
O'Dowd, M. A	Francis O'Dowd	Post Office	238 00	239 46
*O'Farrell, Margaret	Robert O'Farrell	National Revenue	66 00	15 21
O'Flaherty, M. A	E. J. O'Flaherty	National Revenue	80 59	80 52
O'Leary, Johanna	B. O'Leary	Railways and Canals	49 67	49 56
O'Loane, Teresa E	J. T. O'Loane	Post Office	270 67	270 60
Orr, Lizzie L	W. A. Orr	Indian Affairs	585 76	585 72
Ouellette, Marie L	E. H. Ouellette	Post Office	245 00	244 92
Ouimet, Elizabeth B	*Treffle Ouimet*	*House of Commons*	*111 25*	*218 48*
*Owen, Keziah	A. W. Owen	Marine and Fisheries	349 42	29 11
*Panet, Euphemie E	Chas. Panet	House of Commons	174 65	160 05
Paquet, Marie E	E. T. Paquet	Post Office	404 67	404 64
Park, Edith	W. A. Park	National Revenue	294 00	294 00
Parker, Mary P	*Fred John Parker*	*National Revenue*	*110 50*	*216 91*
Parker, Winnifred	Wm. Parker	Post Office	210 00	210 00
Parkhill, Ida L	W. J. Parkhill	National Revenue	164 14	164 04
Patrick, Mary	G. M. Patrick	Post Office	110 82	110 76
Patteson, Marie	T. C. Patteson	Post Office	580 00	579 96

Appendix No. 10—Continued

Civil Servants Widows Annuities Act, 1927—*Continued*

Amounts paid to widows of deceased contributors to Superannuation under part I of the Superannuation and Retirement Act—*Continued*

Widow	Contributor	Department	Annual Allowance	Amount paid during 1928-29
				$ cts.
Pelletier, Josephine	M. Pelletier	Post Office	190 72	190 68
Pereira, Lizzie	L. C. Pereira	Interior	490 00	489 96
Perry, Sarah	H. C. Perry	National Revenue	21 00	17 50
Phair, Maud	W. B. Phair	Post Office	198 00	198 00
Philibert, Emma	J. E. Philibert	Post Office	232 00	231 96
Phillips, Mabel	R. B. H. Phillips	Post Office	273 79	273 72
Phillips, Maria	W. R. Phillips	Public Works	88 38	88 32
Phillips, Mary H	*Percy Phillips*	*Finance*	*115 38*	*226 53*
Pierson, Ada J	*Chas. Pierson*	*Post Office*	*271 02*	*211 49*
Pirrie, Lillian	T. A. Pirrie	Post Office	76 32	76 32
Plumb, Josephine	Chas. Plumb	Post Office	494 28	494 28
Plummer, G. M	H. Plummer	National Revenue	390 51	390 48
Plunkett, Ada	G. L. Plunkett	Post Office	367 50	367 44
Plunkett, Mary	Wm. Plunkett	National Revenue	225 75	225 72
Polkinghorne, Margaret	J. A. Polkinghorne	House of Commons	283 50	283 44
Pope, Ethelwyn	Geo. D. Pope	Interior	695 25	695 16
Pothier, Jean	D. L. Pothier	National Revenue	19 00	11 06
Powell, Catherine	John Powell	Post Office	89 27	96 59
*Price, Angeline	Geo. Price	National Revenue	82 93	27 64
Prout, Mary	Frank Prout	National Revenue	32 50	32 40
Pryor, Isabella B	*Oswald Pryor*	*National Revenue*	*258 61*	*50 05*
Quain, Ellen	Redmond Quain	National Revenue	411 48	377 19
Quesnel, Sophie	Jules Quesnel	Railways and Canals	132 00	132 00
Quinlan, Julia	M. Quinlan	Post Office	175 00	174 96
Quinn, Catherine	J. D. Quinn	National Revenue	280 00	279 96
Ranahan, Mary	Peter Ranahan	Marine and Fisheries	77 00	83 33
Rand, Mary H	F. C. Rand	National Revenue	214 12	196 24
Reinhardt, Margaret	H. N. Reinhardt	National Revenue	104 82	104 76
Renaud, Mathilde	Jos. E. Renaud	Post Office	256 67	256 56
Rennie, Helen B	Geo. Rennie	National Revenue	350 00	349 92
Reynolds, Elizabeth	W. G. S. Reynolds	Privy Council	32 50	32 40
Riddell, Annie	R. W. Riddell	Post Office	289 50	289 44
Robertson, Annie	Alex. Robertson	Trade and Commerce	70 50	52 83
Robertson, Catherine	J. N. Robertson	Post Office	87 81	87 72
Robidoux, Ellen	N. Robidoux	House of Commons	499 63	499 56
Robinson, Sophie	Geo. Robinson	National Revenue	72 50	72 48
Rogers, Catherine	*Thos. Rogers*	*Governor General's Secretary*	*156 60*	*101 45*
Rogers, Helen	*E. O'B. Rogers*	*National Revenue*	*149 27*	*292 93*
Rogers, Susannah	C. C. Rogers	Interior	224 00	223 92
Rondeau, Aglae	U. Rondeau	Post Office	315 00	315 00
Rooney, Mary	Jno. Rooney	Post Office	125 62	125 52
*Roper, Ella M	S. C. D. Roper	National Revenue	176 00	43 49
Rorison, Elizabeth	B. D. D. Rorison	Post Office	168 00	140 00
Ross, Ada	Alex. Ross	National Revenue	244 72	244 68
Ross, Bella J	C. W. Ross	Railways and Canals	392 00	391 92
Ross, Rebecca	Geo. Ross	Post Office	965 42	965 40
Rossiter, Hannah	*J. E. Rossiter*	*Post Office*	*90 38*	*177 47*
Rouleau, Josephine	F. Rouleau	House of Commons	210 00	210 00
Rourke, Elizabeth	J. E. Rourke	Finance	700 75	700 68
Rousseau, Caroline	H. B. Rousseau	Post Office	189 00	189 00
*Roy, Elizabeth	Alex. Roy	National Revenue	28 00	16 31
Roy, Fabiola	E. F. E. Roy	Public Works	189 00	190 50
Ryan, Margaret	*Jeremiah J. Ryan*	*Post Office*	*131 46*	*258 11*
Sandall, Mary A	H. P. Sandall	National Revenue	266 70	266 64
Scholfield, Mary C	Thos. Scholfield	National Revenue	93 54	93 48
Scholfield, Sarah	Fergus Scholfield	Marine and Fisheries	61 25	61 20
Schreiber, Julia	Sir C. Schreiber	Privy Council	1,050 00	1,050 00
Scott, Elizabeth	Andrew Scott	National Revenue	280 00	279 96
Shanacy, Jane F	Michael Shanacy	National Revenue	208 00	207 96
Shaw, Elizabeth	Abraham Shaw	National Revenue	555 33	555 24
Shaw, Louisa	Jas. F. Shaw	National Revenue	590 62	590 52

Appendix No. 10—Continued

Civil Servants Widows Annuities Act, 1927—*Continued*

Amounts paid to widows of deceased contributors to Superannuation under part I of the Superannuation and Retirement Act—*Continued*

Widow	Contributor	Department	Annual Allowance	Amount paid during 1928-29
				$ cts.
Simpson, Jenny	J. B. Simpson	Auditor General	315 00	315 00
Slattery, Elizabeth	Ralph Slattery	National Revenue	171 92	171 84
Slean, Eliza	John Slean	National Revenue	104 14	104 04
Sloan, Cassie E.	M. W. Sloan	Post Office	210 00	210 00
Smith, Agnes	Geo. Smith	National Revenue	155 90	155 88
Smith, Agnes B.	E. J. M. Smith	Public Works	428 46	428 40
Smith, Emily A.	Sidney Smith	Post Office	698 76	698 76
Smith, Gertrude E.	*T. J. Smith*	*Post Office*	*280 00*	*247 59*
Smith, Jennie F.	Fred W. Smith	Indian Affairs	266 51	266 40
Smith, Margaret H.	*George Smith*	*National Revenue*	*355 83*	*103 29*
Soutter, Eliza	Alex. Soutter	Senate	367 50	367 42
*Spereman, Annie	J. J. Spereman	National Revenue	248 00	82 64
Standish, Dorothy	J. G. Standish	National Revenue	339 56	339 48
Stanton, Sabina	E. P. Stanton	Post Office	536 29	536 28
Stayner, Jessie	T. A. Stayner	National Revenue	51 00	
Steckel, Mary	L. J. Steckel	Public Works	538 86	538 80
Steele, Mathilda	V. H. Steele	Marine and Fisheries	396 00	396 00
Steers, Annie	C. J. Steers	Interior	490 00	489 96
Steffens, Margaret	John Steffens	Railways and Canals	71 42	71 40
Stevens, Alicia	C. F. Stevens	National Revenue	133 00	132 96
*Stewart, Alma	Douglas Stewart	Justice	698 54	480 70
Stewart, Isabel	E. N. S. Stewart	National Revenue	123 75	134 03
Stewart, Isabelle	Sam. Stewart	Indian Affairs	490 00	489 96
Stimpson, Kate	F. C. Stimpson	National Revenue	341 00	340 92
Stinson, Susan	Thomas Stinson	National Revenue	129 31	129 24
Stoddart, Helen	Jas. Stoddart	Post Office	198 27	198 24
Stratton, Rose	W. C. Stratton	National Revenue	517 05	516 96
Strongman, Mary	Wm. Strongman	Post Office	144 94	144 84
Strous, Ida	Jas. Strous	Post Office	145 55	145 44
Sutherland, Kate	E. D. Sutherland	Auditor General	1,050 00	1,050 00
Swan, Hannah	W. H. Swan	Post Office	231 00	231 00
Swinburn, Maria	A. R. Swinburn	Interior	218 32	218 28
Talbot, Georgianna	*Octave Talbot*	*Post Office*	*437 50*	*182 25*
Taylor, Elizabeth	Charles Taylor	National Revenue	78 00	78 00
Tetu, Emilie D.	*J. D. H. Tetu*	*Post Office*	*165 26*	*324 53*
Theriault, Rose	J. A. Theriault	Public Works	215 42	215 40
Thompson, Elizabeth	James Thompson	Post Office	197 64	82 35
Thompson, Irene	H. P. Thompson	Post Office	273 00	273 00
Thompson, Theresa	Robt. Thompson	Post Office	312 81	312 72
Toller, Annie F.	Fred Toller	Finance	558 54	558 48
Towers, Elizabeth	*Geo. T. Towers*	*Post Office*	*45 00*	*88 37*
Trainor, Ellen	B. Trainor	Post Office	210 00	210 00
Travis, Minnie	L. W. Travis	Post Office	108 00	108 00
*Trudel, Louise	J. B. Trudel	Senate	276 50	224 45
Tupper, Rhoda L.	*C. W. Tupper*	*National Revenue*	*98 73*	*169 05*
Tyson, Elizabeth	A. M. Tyson	National Revenue	91 95	91 92
Vankoughnet, Lucy	L. Vankoughnet	Indian Affairs	528 00	528 00
Vavasour, Isobel	E. W. Vavasour	Post Office	245 00	244 92
Venning, Frances	*R. N. Venning*	*Marine and Fisheries*	*495 34*	*18 63*
Verner, Helene	J. W. D. Verner	Agriculture	280 00	279 96
Verreault, Exilia	J. E. Verreault	Public Works	37 50	37 44
Verret, Annie	G. C. Verret	Public Works	44 64	44 64
Waller, Annie	John Waller	National Revenue	56 31	56 28
Walsh, Alice	*Robert Walsh*	*Post Office*	*245 00*	*69 78*
Walsh, Helen	W. J. Walsh	Patent and Copyright	273 67	273 60
Warwicker, Lydia	F. S. Warwicker	Post Office	181 84	181 80
Waterman, Anne	W. L. Waterman	Post Office	288 96	288 96
Weyms, Eva	Chas. Weyms	National Revenue	189 44	189 36
White, Adeline	E. White	National Revenue	146 21	133 98
White, Clara	F. White	R.C.M.P.	875 00	874 92
White, Mary	C. W. White	Marine and Fisheries	140 99	140 88
Whittaker, Mary	W. C. Whittaker	Finance	437 50	437 40

Appendix No. 10—Concluded

Civil Servants Widows Annuities Act, 1927—*Concluded*

Amounts paid to widows of deceased contributors to Superannuation under part I of the Superannuation and Retirement Act—*Concluded*

Widow	Contributor	Department	Annual Allowance	Amount paid during 1928-29
				$ cts.
Wilkes, Margaret	E. T. Wilkes	National Revenue	171 84	171 84
Willimott, Susan	C. W. Willimott	Interior	264 69	264 60
Williston, Kate	W. W. Williston	Marine and Fisheries	43 50	47 06
*Wilmot, Mary	J. B. Wilmot	Trade and Commerce	144 00	105 67
Wilson, Annie	David Wilson	National Revenue	207 61	207 60
*Wiltshire, Margaret	John Wiltshire	Printing and Stationery	203 01	32 73
Winters, Melissa	Wm. Winters	Railways and Canals	33 52	33 48
Wood, Emily	F. F. Wood	National Revenue	63 00	63 00
Worsnop, Mary	A. A. Worsnop	National Revenue	485 62	445 06
Wright, Harriet	J. P. Wright	Railways and Canals	200 00	199 92
York, Jennie	Dunbar York	Post Office	210 00	210 00
				140,569 91

* Dead.

Note.—Those shown in Italics are annuitants who came under the Act during the fiscal year.

Summary

—	Payments on account of employees retired prior to March 31, 1928	Payments on account of employees retired during fiscal year ended March 31, 1929	Total payments during fiscal year
	$ cts.	$ cts.	$ cts.
Superannuation No. 1, Revised Statutes, 1906, Chap. 17	573,489 55	4,171 68	577,661 23
Superannuation No. 2, Revised Statutes, 1906, Chap. 17	45,773 48	769 05	46,542 53
Superannuation No. 3, Printing Bureau	17,791 53	.....	17,791 53
Superannuation No. 4, Public Service Retirement Act	671,611 42	.....	671,611 42
Superannuation No. 5, Civil Service Superannuation Act, 1924	438,503 23	254,217 06	692,720 29
Superannuation No. 6, Civil Servants Widows Annuities Act, 1927	132,000 53	8,569 38	140,569 91
Totals Superannuation payments	1,879,169 74	267,727 17	2,146,896 91

Appendix No. 11

PUBLIC WORKS—CHARGEABLE TO INCOME

—	$ cts.	$ cts.	$ cts.
CONSTRUCTION, MAINTENANCE, REPAIRS, ETC.			
PUBLIC BUILDINGS			
Nova Scotia—			
Halifax—Immigration Building—Payment to Department of Railways and Canals for accommodation	25,000 00		
Halifax—Repairs to buildings and wharfs at R.C.N. Barracks and H.M.C. Dockyard	33,413 80		
Halifax—Rockhead Hospital—Repairs and improvements	1,921 33		
North Sydney—Public Building—Addition	7,502 05		
Truro—Public Building—Addition	21,389 76		
Truro—Tractor for postal purposes	1,277 60		
		90,504 54	
New Brunswick—			
Buctouche—Public Building	721 63		
Lancaster Hospital—Government's share of cost of local improvements	14,043 68		
Newcastle—Public Building—Improvements, etc	2,544 74		
St. Croix—Building for Customs-Excise and Immigration purposes at International Bridge	5,280 49		
St. John Quarantine Station—Partridge Island—Repairs and improvements	13,590 18		
St. Stephen—Public Building—Improvements and alterations	2,345 37		
West St. John—Immigration Building—Improvements, alterations and repairs	9,997 48		
		48,523 57	
Maritime Provinces Generally—			
Dominion Public Buildings—Improvements, repairs, etc		42,994 31	
Quebec—			
Baie St. Paul—Public Building	8,827 17		
Chicoutimi—Public Building—Addition	455 87		
Dominion Public Buildings—Improvements, repairs, etc	101,997 44		
Drummondville—Public Building—Addition	2,660 64		
Granby—Public Building—Improvements, alterations and repairs	6,223 74		
Hull—Public Building—Improvements and alterations	3,566 28		
Kenogami—Public Building	907 73		
Levis—Public Building—Improvements and repairs	2,630 67		
Limoilou—Public Building	3,519 62		
Magog—Public Building—Improvements and repairs	2,817 00		
Maisonneuve—Public Building	100,000 00		
Maniwaki—Public Building—Drain	1,946 95		
Mont Laurier—Public Building	2,981 81		
Montreal—Craig St. Drill Hall—Government's share of cost of local improvements	1,741 05		
Montreal—General Post Office—Stonework (Governor General's Warrant, Aug. 30, 1928, P.C. 1566)	9,790 30		
Montreal—General Post Office—Reorganization	3,500 00		
Montreal—Government's share of cost of local improvements	27,921 95		
Montreal—New Examining Warehouse—Alterations and improvements	15,611 47		
Montreal—Old Examining Warehouse—Reconstruction	99,992 00		
Montreal—Postal Station "B"—Improvements and alterations	4,217 13		
Montreal—Postal Station "H"—Improvements to heating	4,485 94		
Montreal—Postal Terminal building	30,173 46		
Montreal—Postal Station in Outremont Division	32,313 91		
Carried forward	468,282 13	182,022 42	

Appendix No. 11—Continued

PUBLIC WORKS—CHARGEABLE TO INCOME—*Continued*

	$ cts.	$ cts.	$ cts.
Brought forward	468,282 13	182,022 42	
CONSTRUCTION, MAINTENANCE, REPAIRS, ETC.—*Continued*			
PUBLIC BUILDINGS—*Continued*			
uebec—Concluded			
Montreal—Towards purchase of Lavut Building for Postal Station "G"	14,004 28		
Quebec Citadel—Governor General's Quarters—Additions, alterations and improvements	142,116 08		
Quebec—Customs Examining Warehouse—Improvements, alterations and repairs	3,736 44		
Quebec—Public Building—Improvements and repairs	7,581 90		
Quebec—Savard Park Hospital—Repairs, alterations, and addition	43,736 73		
Rock Island—Customs-Excise Building	15,109 91		
St. Jacques L'Achigan—Public Building	2,114 66		
St. Jean—Customs House—Improvements and repairs	1,355 40		
Ste. Therese—Public Building—Repairs and improvements	990 75		
Thetford Mines—Armoury—Improvements and repairs	2,616 46		
Trois Rivieres—Government's share of cost of local improvements	2,247 81		
Waterloo—Public Building	15,315 95		
Westmount—Armoury	12,999 80		
		732,208 30	
Ontario—			
Chatham—Public Building—Addition	17,678 61		
Collingwood—Public Building—Improvements and repairs	4,386 80		
Dominion Public Buildings—Improvements, repairs, etc	114,913 85		
Durham—Public Building	642 44		
Hamilton—Duffield Building—Improvements and repairs	11,222 04		
Hamilton—Public Building—Alterations and repairs	15,976 47		
Hespeler—Public Building	5,799 92		
Listowel—Public Building—Improvements and repairs	2,098 00		
London—Public Building—Improvements, alterations and repairs	6,567 80		
London—Tractor for postal purposes	1,277 96		
Niagara Falls—Public Building	5,058 06		
North Bay—Public Building—Improvements and alterations	6,496 06		
Oshawa—Customs Examining Warehouse—Addition	19,550 79		
Oshawa—Public Building—Installation of elevator and improvements, etc	7,998 49		
Ottawa Departmental Buildings—Fittings, etc	60,000 00		
Ottawa—Forest Products Laboratory—Improvements, alterations and fittings	1,718 00		
Ottawa—Greenhouse	25,095 57		
Ottawa—Improvements of square west of Post Office	2,727 89		
Ottawa—Laboratory for Department of Mines, Booth St., and alterations	53,100 43		
Ottawa—Post Office—Addition	327 26		
Ottawa—Purchase of property on Sussex Street	524,392 11		
Ottawa—Rideau Hall—Alterations, improvements and furnishings	49,999 85		
Ottawa—Towards purchase of building for Government Workshops	12,755 00		
Ottawa—Towards purchase of Daly Building	118,000 00		
Ottawa—West Block—Elevator	165 85		
Rockland—Public Building	4,235 53		
Sarnia—Public Building—Improvements and repairs	2,371 25		
Carried forward	1,074,556 03	914,230 72	

Appendix No. 11—Continued

PUBLIC WORKS—CHARGEABLE TO INCOME—*Continued*

—	$ cts.	$ cts.	$ cts.
Brought forward	1,074,556 03	914,230 72	
CONSTRUCTION, MAINTENANCE, REPAIRS, ETC.—*Continued*			
PUBLIC BUILDINGS—*Continued*			
Ontario—Concluded			
Sault Ste. Marie—Public Building—Improvements and repairs	2,982 00		
Simcoe—Public Building—Improvements and repairs	2,167 07		
Strathroy—Public Building—Improvements, alterations and repairs	5,500 00		
Sturgeon Falls—Public Building	24 04		
Sudbury—Public Building—Addition and alterations	10,023 23		
Timmins—Public Building	8,115 75		
Toronto—Customs House	42 00		
Toronto—Postal Station "A"—Mechanical equipment	117,346 49		
Toronto—Taxation Office—Improvements and repairs	6,594 22		
Trenton—Public Building—Government's share of cost of local improvements	1,335 03		
Trenton—Public Building—Improvements and repairs	2,500 00		
Walkerton—Public Building—Improvements	2,849 46		
Whitby—Public Building—Improvements	2,080 60		
Woodstock—Public Building—Improvements to lighting	1,477 10		
		1,237,593 02	
Manitoba—			
Dauphin—Public Building—Addition	77 81		
Dominion Public Buildings—Improvements, repairs, etc.	19,402 56		
Emerson—Building for Customs and Immigration purposes	8,004 01		
Transcona—Public Building	100 72		
Winnipeg—Fort Osborne Barracks—New Boilers	34,705 50		
Winnipeg—Hospital for Department of Soldiers' Civil Re-establishment	215,516 49		
Winnipeg—Immigration Building No. 1—Improvements and repairs	6,366 85		
Winnipeg—Minto Street Armoury—Fittings	12,175 04		
Winnipeg—Post Office—Installation of pickup tables	7,000 00		
Winnipeg—Public Building—Improvements and Alterations	9,111 11		
Winnipeg—Immigration Building No. 2—Repairs and improvements	2,698 90		
		315,158 99	
Saskatchewan—			
Battleford—Public Building—Improvements and repairs	1,733 00		
Dominion Public Buildings—Improvements, repairs, etc.	16,654 32		
Melville—Public Building	5,000 00		
Prince Albert—Immigration Building	10,939 99		
Prince Albert—Public Building—Addition	49,999 44		
Regina—Tractor for postal purposes	1,379 40		
Regina—Public Building—Exchequer Court Award	125,000 00		
Rosthern—Public Building	8,668 78		
Saskatoon—Public Building	54,590 55		
Swift Current—Public Building	3,325 10		
Tisdale—Public Building	26,842 08		
		304,132 66	
Alberta—			
Calgary—Grain Inspection Building	2,650 38		
Dominion Public Buildings—Improvements, repairs, etc	16,993 65		
Edmonton—Post Office—Installation of pickup table	3,500 00		
Edmonton—Tractor for postal purposes	1,431 80		
Wainwright—Public Building	16,012 22		
		40,588 05	
Carried forward		2,811,703 44	

Appendix No. 11—Continued

PUBLIC WORKS—CHARGEABLE TO INCOME—*Continued*

—	$ cts.	$ cts.	$ cts.
Brought forward		2,811,703 44	
CONSTRUCTION, MAINTENANCE, REPAIRS, ETC.—*Continued*			
PUBLIC BUILDINGS—*Concluded*			
British Columbia—			
Dominion Public Buildings—Improvements, repairs, etc.	37,068 24		
Esquimalt—General repairs and improvements at R.C.N. Barracks and H.M.C. Dockyard	19,969 63		
Douglas—Site and building for Immigration and Customs-Excise purposes	17,475 73		
Vancouver—Public Building—Improvements	43,098 04		
Vancouver—Public Building—One year's interest at 5% on mortgage of $400,000	20,000 00		
Vancouver—Post Office—Installation of pickup tables	7,000 00		
William Head—Quarantine Station—Office building for Customs and Quarantine purposes	3,908 38		
		148,520 02	
Generally—			
Experimental Farms—Replacements, repairs, improvements, etc	98,691 47		
Flags for Dominion Public Buildings	5,000 00		
Installation of fuel saving devices	9,992 75		
Military Buildings—Repairs, fittings, alterations and additions	44,356 96		
Military Hospitals—Repairs and improvements	78,999 30		
Public Buildings—Generally	43,688 13		
Purchase of stamp cancelling machines	19,537 00		
		300,265 61	
RENTS, REPAIRS, FURNITURE, HEATING, ETC.			
Ottawa Public Buildings and Grounds—			
Dominion Observatory and Geodetic Survey Building—Repairs, improvements, maintenance of grounds, etc.	4,135 72		
Water	45,000 00		
Elevator Attendants	96,992 52		
Lighting, including roads and bridges	94,480 36		
Heating, including salaries of engineers, firemen and watchmen	394,143 19		
Departments Generally—Char service, including $100 to E. Snowden for firing the noon gun	376,468 18		
Repairs, improvements, additions and maintenance	860,119 12		
Rideau Hall, including grounds—Improvements, furniture, maintenance, etc	59,786 88		
Rideau Hall—Allowance for fuel and light	19,000 00		
Telephone service	99,999 07		
		2,050,125 04	
Dominion Public Buildings—			
Dominion Immigration Buildings—Repairs, improvements, additions, furniture, etc	24,092 51		
Dominion Quarantine Stations—Maintenance	14,642 59		
Fittings, general supplies and furniture	134,777 41		
Heating	392,003 89		
Lighting	218,113 55		
Power for running elevators, stamp cancelling machines, etc	84,334 27		
Rents	1,651,445 92		
Rents—Exchequer Court award	2,474 54		
Salaries of caretakers, engineers, firemen, etc	1,069,208 30		
Supplies for caretakers, engineers, firemen, etc	44,996 51		
Water	75,156 92		
Yukon Public Buildings—Rents, repairs, fuel, light, water service and caretakers salaries	25,504 37		
Victoria, B.C.—Astrophysical Observatory (Little Saanich Mountain)—Maintenance, repairs and improvements	3,071 84	3,739,772 62	
Total Public Buildings			9,050,386 73
Carried forward			9,050,386 73

Appendix No. 11—Continued

PUBLIC WORKS—CHARGEABLE TO INCOME—*Continued*

—	$ cts.	$ cts.	$ cts.
Brought forward			9,050,386 73
CONSTRUCTION, MAINTENANCE, REPAIRS, ETC.—*Continued*			
HARBOURS AND RIVERS			
Nova Scotia—			
Auld's Cave—Wharf	1,608 57		
Bailey's Brook—Wharf repairs	2,490 91		
Barrington Passage—Ice piers	104 97		
Barrington Passage—Wharf repairs	2,722 92		
Barrio's Beach—Breakwater extension	3,788 29		
Basswood Beach—Extension to beach protection	2,453 38		
Bayfield—Wharf repairs	3,996 49		
Bear Cove—Breakwater repairs	3,387 53		
Blandford—Breakwater repairs	2,219 62		
Blue Rocks—Wharf repairs	2,697 88		
Bridgewater—Repairs to and reconstruction of railway wharf	22,833 85		
Brooklyn—Wharf repairs	1,097 27		
Brooklyn—Breakwater repairs	3,885 20		
Canso—Wharf repairs	1,292 15		
Cape Negro Island—Breakwater—to complete	1,997 61		
Cheverie—Wharf repairs	1,599 43		
Clarks Harbour—Wharf	7,109 54		
Comeauville—Breakwater extension	5,562 46		
Devil's Island—Breakwater repairs	1,399 22		
Digby—Repairs and renewals to pier	4,940 06		
Digby Pier—Improvement	4,078 92		
Dingwall (Aspy Bay)—Breakwater	14,290 47		
Dover—Wharf repairs and extension	2,906 35		
Eagle Head—Breakwater repairs	1,800 49		
East End (Cripple Creek)—Harbour improvements	9,511 50		
East River—In full and final settlement of claim of Halifax Dredging Co., Ltd., in connection with contract for dredging at East River, N.S.	6,033 50		
Feltzen South—Wharf repairs	1,399 91		
Finlay Point—Harbour improvements	3,765 50		
Fourchu—Rebuilding protection work	3,698 36		
Grand Etang—Repairs to pier	2,788 36		
Grass Cove—Breakwater—Wharf	30,759 00		
Grosses Coques—Sluice gates	2,981 71		
Gulliver's Cove—Breakwater repairs and improvements	2,972 23		
Guysborough—Dredging	24,788 43		
Hall's Harbour—Rebuilding vessel berth	1,199 90		
Harbours and Rivers Generally—Repairs and improvements	65,006 31		
Harbourville—Breakwater	11,038 74		
Harbourville—Repairs to west breakwater	1,299 99		
Inverness—Repairs to harbour works	4,066 43		
Iona—Wharf repairs	7,000 29		
Ketch Harbour—Wharf	1,050 53		
Kings Bay—Breakwater	3,198 96		
Kraut Point—Wharf repairs	1,495 60		
LaHave River—Dredging	49,598 12		
L'Ardoise—Repairs to and extension of harbour protection	1,796 60		
Little Anse—Breakwater repairs	599 78		
Little Harbour—Breakwater extension and improvements	3,052 85		
Little Tancook—Breakwater repairs	1,205 11		
Lower L'Ardoise—Breakwater repairs	7,555 95		
Lower Wedgeport—Wharf repairs and extension	3,573 15		
Lower Woods Harbour—Purchase of wharf	2,342 12		
Lunenburg—Dredging	35,990 52		
Malagash—Wharf repairs	3,599 23		
Malignant Cove—Wharf extension	4,337 61		
Margaree Harbour—Repairs to harbour works	2,480 27		
Carried forward	400,450 14		9,050,386 73

Appendix No. 11—Continued

PUBLIC WORKS—CHARGEABLE TO INCOME—*Continued*

—	$ cts.	$ cts.	$ cts.
Brought forward	400,450 14		9,050,386 73
CONSTRUCTION, MAINTENANCE, REPAIRS, ETC.—*Continued*			
HARBOURS AND RIVERS—*Continued*			
Nova Scotia—Concluded			
Melbourne—Wharf extension	2,482 81		
Meteghan—Wharf repairs	2,318 72		
Meteghan River—Breakwater repairs	1,487 93		
Middle West Pubnico—Wharf repairs	2,624 28		
Murphy's Pond, Port Hood—Harbour improvements	8,047 42		
New Harbour (Antigonish-Guysborough Co.)—Breakwater extension	23,098 78		
North West Cove (Tancook)—Breakwater repairs	1,800 00		
Parrsboro—Repairs to harbour protection works	3,466 20		
Peas Brook—Wharf	4,730 83		
Pembroke—Wharf extension	3,613 10		
Pictou—Repairs to railway wharves	13,918 44		
Pictou Landing—Breakwater	5,935 11		
Port Clyde—Purchase and reconstruction of wharf	2,428 93		
Port Hilford—Wharf repairs	3,099 81		
Port Lorne—Breakwater repairs	5,990 65		
Port Maitland—Breakwater extension	15,132 83		
Round Hill—Wharf repairs	4,792 03		
Salmon River—Breakwater repairs	3,002 03		
Scott's Bay—Rebuilding part of south breakwater	6,894 72		
Seal Harbour—Breakwater extensions	1,299 16		
Shag Harbour—Breakwater-wharf	7,306 37		
Sheet Harbour West—Wharf repairs	1,025 25		
Shelburne—Wharf improvements	4,262 77		
Soldiers' Cove—Wharf replacement	4,077 02		
St. Francis Harbour—Breakwater extension, dredging and groyne	5,497 36		
St. Joseph du Moine—Breakwater extension and improvements	2,780 82		
Surettes Island—Wharf	2,773 53		
Sydney—Wharf	51,757 36		
Tangier—Wharf repairs	1,299 64		
Terrance Bay—Wharf repairs	4,709 56		
Upper Prospect—Breakwater repairs	865 05		
Victoria Harbour—Wharf repairs	1,999 97		
Washabuck Centre—Wharf repairs	1,199 81		
West Advocate—Extension to Breakwater-wharf	86 19		
West Baccaro—Extension and repairs to beach protection and breakwater	5,014 01		
West Arichat—Breakwater repairs	2,105 31		
Westport—Wharf repairs	1,698 59		
Yarmouth Bar—Breakwater repairs and improvements	3,963 43		
		619,035 96	
Prince Edward Island—			
Bonshaw—Freight shed	2,535 90		
Cape Traverse—Wharf repairs and improvements	2,901 76		
Chapel Point (St. Georges)—Wharf repairs	2,916 76		
Charlottetown—Reconstruction of Potato Shed on wharf (Governor General's Warrant June 30, 1928 P.C. 1151)	62,666 03		
Charlottetown—Reconstruction of railway wharf	102,759 11		
Egmont Bay—Wharf	8,355 02		
French River—Wharf repairs	2,854 36		
Graham's Pond—Breakwater repairs	2,932 65		
Harbours and Rivers Generally—Repairs and improvements	8,370 27		
McPherson's Cove—Wharf repairs	3,194 62		
Miminigash Harbour—Breakwater reconstruction	8,596 55		
Mink River—Wharf repairs	1,966 55		
Port Selkirk—Wharf repairs	6,869 93		
Rustico Harbour—Breakwater repairs	19,768 09		
Carried forward	236,687 60	619,035 96	9,050,386 73

Appendix No. 11—Continued

PUBLIC WORKS—CHARGEABLE TO INCOME—*Continued*

—	$ cts.	$ cts.	$ cts.
Brought forward	236,687 60	619,035 96	9,050,386 73
CONSTRUCTION, MAINTENANCE, REPAIRS, ETC.—*Continued*			
HARBOURS AND RIVERS—*Continued*			
Prince Edward Island—Concluded			
Souris Harbour —Breakwater repairs	8,347 57		
Steven's Pier (Montague)—Repairs	1,468 88		
Tracadie—Breakwater repairs	1,638 68		
Victoria—Wharf repairs and shed	5,164 14		
West Point—Wharf repairs	3,861 70		
West River Bridge—Wharf reconstruction and extension	137 03		
		257,305 60	
New Brunswick—			
Barker's—Wharf repairs	6,195 11		
Blue Cove—Breakwater	21,593 67		
Burnt Church—Wharf repairs	6,987 54		
Campbellton—Dredging	16,628 20		
Campbellton—Wharf repairs	3,616 95		
Cape Bald—Breakwater repairs	4,976 63		
Cumberland Bay—Wharf repairs	864 71		
Eel River Bridge—Wharf	4,147 13		
Escuminac—Breakwater extensions	29,285 75		
Ford's Mills—Wharf	655 33		
Fort Dufferin—Repairs to breastworks	18,630 78		
Green Point—Breakwater	43,215 75		
Hampstead—Wharf repairs	1,648 23		
Harbours and Rivers Generally—Repairs and improvements	43,797 64		
Hebert's Point, Hardwicke—Dredging	11,325 82		
Kent Boom—Wharf	3,226 78		
Lameque—Wharf extension	154 98		
Leonardville—Wharf repairs	6,788 77		
L'Etang—Wharf repairs	6,484 44		
Lorneville—Dredging	7,325 44		
Martin's Head—Breakwater repairs	2,670 15		
North Head—Breakwater repairs	10,208 12		
Point du Chene—Repairs to breakwaters	2,501 96		
Point Sapin—Breakwater extension	10,859 46		
Public Landing—Wharf repairs	3,495 36		
Richardson—Reconstruction of wharf and floating slip	5,182 69		
St. Nicholas River—Wharf repairs	939 73		
St. Simon—Wharf	25,096 32		
Seeley's Beach—Pier	2,095 85		
Shippigan Harbour—Dredging	230 28		
Tracadie Harbour—Breastworks and breakwaters	16,084 73		
Young's Cove—Wharf repairs	2,058 06		
		318,972 36	
Quebec—			
Angliers—Wharf—To complete	2,818 49		
Anse a Beaufils—Reconstruction of and repairs to jetties	3,597 54		
Anse a la Louise—Breakwater training pier	1,144 42		
Anse St. Jean—Wharf repairs and extension	342 17		
Bagotville—Wharf repairs and improvements	20,615 91		
Baie St. Paul—Wharf repairs	1,127 09		
Barachois de Malbaie—Repairs to training jetty	8,350 65		
Beaupre—Dredging—Ste. Anne Paper Company to contribute one-third of cost	57,086 27		
Beloeil Station—Repairs to guard piers and boom	3,471 16		
Berthier (en bas)—Wharf repairs	2,442 90		
Berthierville—Dredging	35,169 47		
Betsiamites (Bersimis)—Wharf repairs	1,098 10		
Bic—Wharf repairs and improvements	4,993 92		
Bonaventure West—Breakwater extension	2,150 55		
Buckingham—Rebuilding float	1,199 80		
Cabano—Wharf repairs	1,455 94		
Carried forward	147,064 38	1,195,313 92	9,050,386 73

Appendix No. 11—Continued

PUBLIC WORKS—CHARGEABLE TO INCOME—*Continued*

—	$ cts.	$ cts.	$ cts.
Brought forward	147,064 38	1,195,313 92	9,050,386 73
CONSTRUCTION, MAINTENANCE, REPAIRS, ETC.—*Continued*			
HARBOURS AND RIVERS—*Continued*			
Quebec—Continued			
Cacouna—Wharf repairs	1,514 33		
Cap Chat—Dredging, The Canadian Paper Board Co. to contribute one-third of cost	45 00		
Cap Chat—Wharf extension and repairs	29,997 71		
Cap a L'Aigle—Wharf repairs	1,983 93		
Cap de la Madeleine—Wharf extension and repairs	58,528 87		
Cap St. Ignace—Wharf repairs	2,707 91		
Caughnawaga—Wharf improvements	4,576 24		
Chandler—Wharf improvements	8,451 86		
Charlemagne—Dredging	14,258 10		
Choisy—Wharf reconstruction	2,489 00		
Colonie des Greves—Wharf repairs	1,163 70		
Contrecoeur—Dredging	20,150 91		
Crabtree Mills—Reconstruction of ice-breaker	1,352 34		
Cross Point—Wharf repairs	4,339 66		
Deschambault—Wharf repairs	9,764 29		
Doucet's Landing (Ste. Angele de Laval)—Wharf reconstruction	105,835 26		
Doucet's Landing (Ste. Angele de Laval)—Dredging	183 46		
Dundee—Improvement of drains	7,959 44		
Ellis Bay—Harbour improvements	191,439 09		
Etang du Nord—Breakwater-wharf	19,931 21		
Etang du Nord—Contribution towards the construction of roadway approach to the breakwater wharf, the Provincial Government to contribute the balance of cost and undertake the future maintenance of same.	316 57		
Fabre—Wharf repairs	937 35		
Fassett—Wharf repairs	1,423 86		
Father Point—Wharf repairs and improvements	6,190 59		
Fort Coulonge—Wharf repairs	944 61		
Gascons—Wharf reconstruction—To complete	1,401 21		
Grand Mere—Landing	43 75		
Grande Riviere (Gaspe)—Wharf reconstruction	17,655 09		
Grindstone—Wharf repairs	5,003 07		
Grindstone—Wharf repairs and improvements	3,983 40		
Grosse Isle—Wharf repairs	9,876 28		
Harbours and Rivers Generally—Repairs and improvements	74,899 36		
Hopetown—Miller and Mann Road—Breakwater	4,414 40		
Hudson—Wharf reconstruction	795 00		
Ile Perrot Nord—Wharf repairs	2,659 98		
Isle aux Coudres—Wharf	9,975 20		
Isle aux Grues—Wharf replacement	8,896 80		
Isle Verte—Wharf repairs	1,656 83		
Isle Verte (Riviere Verte)—Wharf replacement	2,599 88		
Kamouraska—Wharf repairs	2,486 03		
Knowlton—Wharf repairs	269 75		
Lachine—Wharf repairs	2,073 97		
Lac Megantic—Shore protection	901 61		
Lac Megantic—Wharf repairs	1,410 87		
Lake St. Louis—Dredging	55,998 02		
Lanoraie—To complete ice breakers	1,200 00		
Laprairie—Repairs to dyke	5,958 66		
Les Escoumains—Wharf reconstruction	298 16		
L'Islet—Wharf repairs	3,982 94		
Little Montreal River—Dredging—The Provincial Government to contribute a like amount	779 48		
Louiseville—Wharf reconstruction	139 27		
Lower Miguasha—Wharf	1,995 62		
Carried forward	864,904 30	1,195,313 92	9,050,386,73

Appendix No. 11—Continued

PUBLIC WORKS—CHARGEABLE TO INCOME—*Continued*

—	$ cts.	$ cts.	$ cts.
Brought forward	864,904 30	1,195,313 92	9,050,386 73
CONSTRUCTION, MAINTENANCE, REPAIRS, ETC.—*Continued*			
HARBOURS AND RIVERS—*Continued*			
Quebec—Continued			
Magog—Wharf repairs	827 83		
Mal Bay—Wharf repairs	8,099 08		
Matane—Harbour improvements	10,872 80		
Matane—In full and final settlement of the claim of Messrs. J. R. and J. E. Boulanger in connection with their contract for an extension to the Eastern Breakwater	9,827 00		
Matane—Dredging—Exchequer Court award	30,285 44		
Mechins—Wharf reconstruction and extension	26,000 [illegible]		
Mille Vaches—Wharf repairs	1,861 99		
Moisie—Protection Work	5,199 43		
Montmagny—Wharf repairs	4,270 57		
Natashquan—Wharf extension	9,264 99		
Natashquan—Wharf repairs	1,317 00		
New Carlisle—Wharf reconstruction—To complete	3,958 08		
Nicolet—Wharf reconstruction	5,285 4[illegible]		
Norway Bay—Wharf reconstruction	4,448 59		
Notre Dame de Pierreville—Wharf	13,917 9[illegible]		
Notre Dame du Portage—Wharf repairs	927 06		
Nouvelle River—Training Pier—To complete	1,516 77		
Palmarolle—Wharf	2,514 08		
Paspebiac—Wharf extension	1,688 00		
Peel Head Bay—Wharf repairs	1,408 90		
Petit Capucins—Wharf extension	4,[illegible]49 2[illegible]		
Petite Riviere Est—Breakwater	3,772 94		
Petite Rivière St. Francois—Breakwater wharf	15,953 85		
Petit Saguenay—Wharf extension	4,947 05		
Petite Vallée—Wharf extension and repairs	12,996 30		
Pointe au Pic (Murray Bay)—Wharf repairs	4,687 30		
Pointe Basse—Wharf repairs and improvements	7,455 37		
Point Shea—Wharf improvements	4,041 48		
Richelieu River—Improvements	11,412 85		
Rimouski—Dredging—To complete payments	26,062 38		
Rimouski—Wharf repairs and improvements	14,121 78		
Rivière du Lievre—Lock and Dam—To complete reconstruction of Lockmaster's house at Poupore	2,199 12		
Rivière du Loup (en bas)—Wharf repairs and reconstruction	9,382 38		
Rivière du Loup (en bas)—Wharf repairs	3,808 54		
Rivière du Loup (en haut)—Dredging	34,997 28		
Rivière du Loup (en haut)—In full and final settlement of the claim of Les Chantiers Manseau for dredging performed in 1926	54,503 80		
Rivière Laguere—Dredging—The Provincial Government to contribute a like amount	5,438 55		
Rivière Ouelle—Wharf repairs	9,286 66		
Rivière St. Francois—Dredging	7,501 56		
Roberval—Breakwater reconstruction and extension	28,992 46		
Roberval—Wharf repairs	1,876 36		
Ruisseau Gagnon—Dredging	300 00		
Ruisseau Leblanc—Breakwater	10,120 00		
Ste. Anne de Beaupre—To complete wharf reconstruction	3,700 00		
Ste. Anne de Bellevue—Wharf reconstruction	1,999 95		
St. Andre de Kamouraska—Wharf repairs and improvements	3,929 97		
Carried forward	1.296,523 03	1.195,313 92	9,050,386 73

Appendix No. 11—Continued

PUBLIC WORKS—CHARGEABLE TO INCOME—*Continued*

—	$ cts.	$ cts.	$ cts.
Brought forward	1,296,523 03	1,195,313 92	9,050,386 73
CONSTRUCTION, MAINTENANCE, REPAIRS, ETC.—*Continued*			
HARBOURS AND RIVERS—*Continued*			
Quebec—Concluded			
St. Anicet—Wharf reconstruction	3,806 20		
Ste. Anne de la Pocatiere—Wharf enlargement and repairs	6,195 68		
St. Antoine de Tilley—Dredging	1,356 23		
St. Blaise—Repairs to roadway approach	999 06		
St. Charles—Wharf reconstruction	3,694 43		
St. Eloi (Pointe à la Loupe)—Wharf repairs	1,972 02		
St. Eloi (Rivière Pointe à la Loupe)—Dredging	975 01		
St. Etienne de Malbaie—Wharf extension	9,581 66		
Ste. Flavie—Wharf	13,659 54		
St. Godfroy—Wharf extension	7,057 95		
St. Gregoire de Montmorency—Reconstruction of revetment wall	4,951 17		
St. Henri de Taillon—Wharf replacement	2,207 51		
St. Jean des Piles—Wharf	6,454 55		
St. Jean Port Joli—Wharf repairs	2,392 55		
St. Joachim—Wharf	7,714 71		
St. Juste du Lac—Wharf repairs	1,094 87		
St. Lambert—Reconstruction and repairs to dyke	1,580 80		
St. Louis River—Dredging	15,006 07		
St. Luce—Wharf repairs	1,883 18		
St. Michel des Saints—Improvements on River Cypress	4,904 97		
St. Nicholas—Wharf reconstruction	15,410 83		
St. Ours—Wharf extension	5,049 91		
St. Paul Ile aux Noix—Wharf repairs and widening	1,014 47		
Ste. Petronille—Wharf repairs and improvements	8,634 40		
St. Pierre les Becquets—Dredging	17,997 25		
St. Placide—Wharf reconstruction	82 69		
St. Simeon—Wharf repairs	1,848 35		
St. Zotique—Wharf repairs	3,355 33		
Sabrevois—Wharf reconstruction	1,963 65		
Sorel—Harbour improvements	23,829 89		
Squatteck—Wharf repairs	1,560 56		
Tadoussac (Anse Tadoussac)—Wharf repairs	3,831 09		
Taschereau River—Dredging	3,405 98		
Thurso—Wharf repairs	6,032 21		
Trinity Bay—Dredging	42,981 63		
Trois Rivières—Wharf reconstruction and repairs	342 55		
Trois Pistoles—Repairs to wharfs	4,996 27		
Valleyfield—Dredging	39,163 18		
Varennes—Dredging	18,976 80		
Varennes—Ice breakers and protection work	6,747 35		
Vaudreuil—Dredging	15,942 73		
Vercheres—Reconstruction of ice breaker	1,700 18		
Vercheres—Breakwater, landing and shed	2,006 30		
Ville Marie—Wharf repairs	980 24		
Yamachiche River—Dredging	20,967 04		
Yamaska River—Dredging	15,829 65		
		1,658,661 72	
Ontario—			
Baysville—Wharf reconstruction	2,593 14		
Beaverton—Reconstruction of pier	3,328 04		
Beaverton—In full and final settlement of the claim of D. Conroy in connection with his contract for harbour improvements in 1912-13-14	1,846 11		
Blind River—Dredging	11,738 53		
Bracebridge—Breakwater reconstruction	1,199 16		
Bracebridge—Revetment wall	2,998 00		
Bronte—Repairs to pier	3,294 94		
Bruce Mines—Dredging	23,990 98		
Burlington Channel—Improvements	271 73		
Carried forward	51,260 63	2,853,975 64	9,050,386 73

Appendix No. 11—Continued

PUBLIC WORKS—CHARGEABLE TO INCOME—*Continued*

—	$ cts.	$ cts.	$ cts.
Brought forward	51,260 63	2,853,975 64	9,050,386 73
CONSTRUCTION, MAINTENANCE, REPAIRS, ETC.—*Continued*			
HARBOURS AND RIVERS—*Continued*			
Ontario—Concluded			
Burlington Channel—Reconstruction of South Pier	29,659 17		
Byng Inlet—Dredging	19,994 45		
Chatham—Repairs to revetment walls	9,011 89		
Cobourg—Harbour improvements	31,791 69		
Cockburn Island—Freight shed	2,095 18		
Collingwood—Dredging	19,627 09		
Fitzroy Harbour—Wharf repairs	1,003 13		
Goderich—Harbour improvements	90,554 88		
Grand Bend—Repairs to pier	2,440 97		
Gravenhurst—Harbour improvements	2,398 68		
Hamilton—Harbour improvements	80,789 81		
Harbours and Rivers Generally—Repairs and improvements	46,854 01		
Kenora—Wharf repairs	2,088 03		
Kilworthy (Sparrow Lake)—Wharf	1,639 08		
Kincardine—Harbour repairs and improvements	43,189 57		
Kingston—Dredging	5,258 61		
Kingsville—Repairs to pier	4,428 13		
La Passe—Wharf repairs	813 90		
Leamington—Wharf repairs	2,497 92		
Lions Head—Dredging	17,745 64		
Little Current—Dredging	21,465 87		
Meaford—Towards construction of revetment wall	9,999 17		
Michipicoten River—Wharf repairs	769 07		
Midland—Harbour improvements	47,400 10		
Midland—In full and final settlement of claim of the Macdonald Engineering Co., Ltd., in connection with their contract for wharf and dredging	13,743 01		
Morpeth—Wharf repairs	4,145 05		
Oakville—Reconstruction of pier	21,501 20		
Owen Sound—Harbour improvements	56,962 24		
Pelee Island—Repairs to piers	5,279 63		
Port Arthur—Harbour improvements—Thunder Bay Paper Company to contribute one-third of cost	50,016 15		
Port Bruce—Repairs to piers	2,999 80		
Port Burwell—Harbour repairs and improvements	93,759 73		
Port Colborne—Repairs to harbour works	2,935 90		
Port Dover—Repairs to piers	16,670 28		
Port Hope—Harbour repairs and improvements	31,819 23		
Port Maitland—Repairs to pier	1,379 27		
Port Maitland—Breakwater repairs	13,336 09		
Port Stanley—Harbour repairs and improvements	3,913 58		
River Beaudette—Contribution to the Municipality of the Township of Charlottenburg towards dredging River Beaudette, the Provincial Government and the Municipality to share in the cost	20,000 00		
Rondeau—Harbour repairs and improvements	41,604 54		
Sarnia—Dredging	138,672 72		
Saugeen River—Repairs to harbour works	14,352 46		
Sault Ste Marie—Harbour repairs and improvements	47,308 86		
Severn Bridge—Wharf repairs	1,491 95		
Southampton—Repairs to breakwater	6,599 82		
Tobermory—Wharf	9,544 52		
Toronto—Dredging and Repairs to entrance piers	15,024 03		
Toronto Island—Repairs to groynes	14,994 39		
Treadwell—Wharf repairs	1,798 83		
Wendover—Repairs to wharf and ice piers	3,193 16		
Wheatley—Repairs to pier	2,501 40		
Whitby—Reconstruction of entrance pier	2,841 29		
Windsor—Wharf repairs	2,792 52		
		1,186,048 32	
Carried forward		4,040,023 96	9,050,386 73

Appendix No. 11—Continued

PUBLIC WORKS—CHARGEABLE TO INCOME—*Continued*

—	$ cts.	$ cts.	$ cts.
Brought forward		4,040,023 96	9,050,386 73
CONSTRUCTION, MAINTENANCE, REPAIRS, ETC.—*Continued*			
HARBOURS AND RIVERS—*Continued*			
Manitoba—			
Assiniboine River—Repairs to dykes	6,958 12		
Gimli—Repairs to pier	2,400 48		
Gimli—Reconstruction of protection work	6,966 34		
Harbours and Rivers Generally—Repairs and improvements	4,789 20		
Hnausa—Wharf repairs	7,996 25		
Lac du Bonnet—Wharf reconstruction	5,081 06		
Ninette (Pelican Lake)—Wharf reconstruction	4,105 83		
Red River (Mouth)—Repairs to and extension of jetties	7,155 72		
Roseau River—Improvements	64,345 83		
Selkirk—Reconstruction of dam	1,627 70		
Victoria Beach—Repairs to wharf and approach	4,374 86		
Winnipeg—Wharf	9,316 31		
Improvements of water route between Athapapuskow and Cold Lakes	2,040 83		
		127,158 53	
Saskatchewan and Alberta—			
Alberta Beach, Lac Ste. Anne—Wharf	2,782 90		
Athabaska River—Improvements	3,256 88		
Cowan Dam—Repairs and maintenance	3,257 03		
Faust—Wharf	11,992 48		
Fort McMurray—Wharf	500 00		
Harbours and Rivers Generally—Repairs and improvements	1,400 37		
Highwood River—Contribution towards protection work at the Town of High River, the Dominion Government to contribute 40%, the Province of Alberta 50% and the Town of High River 10%	2,957 58		
Prince Albert—Reconstruction of protection work	9,956 20		
		36,103 44	
British Columbia—			
Arrowhead—Improvements	1,097 77		
Boswell—Wharf repairs	2,096 28		
Brighton Beach—Repairs to float	1,025 84		
Brownsville—Wharf reconstruction and extension	3,547 41		
Cadboro Bay—Dolphins	1,160 00		
Campbell River—Repairs to wharf and float	1,800 00		
Canoe—Wharf repairs	803 93		
Comox—Wharf repairs	2,596 28		
Courtenay River—Renewal of protection work	3,200 31		
Cracroft—Reconstruction of float	1,031 92		
Crooked, Pack and Parsnip Rivers—Improvements	1,445 94		
Fauquiers—Wharf repairs	1,969 73		
Fort St. James—Wharf	6,029 73		
Fraser River—Contribution towards construction of a wing dam on the Fraser River near Agassiz, B.C., the Province of British Columbia and the Corporation of the District of Kent, B.C., each to contribute a like amount	486 84		
Fraser River—In full and final settlement of claim of N. E. Broley, in connection with contract for dam at Woodward's Slough	11,639 74		
Fraser River—Improvements	120,620 87		
Fraser River—Lower—Operation of snagboat	25,697 46		
Fraser's Landing—Wharf repairs	1,364 73		
Ganges—Wharf addition	990 95		
Gillies Bay—Float	1,047 73		
Carried forward	189,653 46	4,203,285 93	9,050,386 73

Appendix No. 11—Continued

PUBLIC WORKS—CHARGEABLE TO INCOME—*Continued*

—	$ cts.	$ cts.	$ cts.
Brought forward	189,653 46	4,203,285 93	9,050,386 73
CONSTRUCTION, MAINTENANCE, REPAIRS, ETC.—*Con.*			
HARBOURS AND RIVERS—*Concluded*			
British Columbia—Concluded			
Ginols—Wharf	136 95		
Gorge Harbour—Float	1,961 70		
Gray Creek—Wharf replacement	1,700 56		
Harbours and Rivers Generally—Repairs and improvements	63,658 14		
Hollyburn—Breakwater repairs	2,478 17		
Hopkin's Landing—Wharf extension	4,468 61		
Horseshoe Bay—Float	3,494 48		
Irvine's Landing, Pender Harbour—Wharf	114 00		
Marpole—Wharf repairs	1,295 18		
Mayne Island—Wharf repairs	1,155 68		
New Westminster—Wharf repairs	1,981 05		
Nicomen Island—Protection work and dyking	7,715 19		
North Gabriola Island—Wharf repairs	2,191 30		
Okanagan River—Reconstruction of dam	23,333 95		
Old Massett—Wharf repairs	3,359 96		
Port Alberni—Assembly wharf	118,218 21		
Port Moody—Wharf repairs	2,000 16		
Port Neville—Float	1,950 58		
Port Simpson—Renewal of wharf head	7,906 67		
Powell River—Breakwater, the Powell River Co., Ltd., to contribute one half of cost	27,074 03		
Princess Creek—Wharf repairs	1,559 85		
Quatsino—Wharf repairs	970 00		
Queen Charlotte City—Renewal of float	1,898 46		
Revelstoke—Repairs to dam	5,874 77		
Riondel—Wharf improvements	2,413 21		
Royston—Wharf repairs	2,199 51		
Salmon Arm—Wharf repairs	3,316 40		
Salmon River—Improvements	1,235 80		
Savary Island—Wharf repairs	5,659 56		
Seton Lake—Wharf	1,379 67		
Sidney—Maintenance of ferry slip	1,195 72		
Sidney—Float and wharf improvements	3,398 68		
Shoal Bay—Wharf repairs	2,516 34		
Squamish—Wharf repairs	10,311 15		
Stewart—Contribution to Provincial Government towards surfacing Stewart-Hyder road	11,100 00		
Steveston—Wharf reconstruction	2,885 96		
Stikine River—Improvements	5,486 15		
Sturdies Bay—Wharf reconstruction and extension	6,008 37		
Tatchi River	2,060 10		
Tofino—Renewal of floats	1,721 00		
Trepanier—Wharf replacement	4,576 54		
Union Bay—Wharf repairs	2,983 30		
Vancouver—Stanley Park—Foreshore protection	7,998 69		
Westview—Wharf	8,041 34		
Willow Point—Wharf repairs	665 61		
		563,304 21	
Yukon—			
Stewart and Yukon Rivers—Improvements		5,000 00	
Generally—			
Harbours and Rivers Generally		29,818 05	
Total Harbours and Rivers			4,801,408 19
Carried forward			13,851,794 92

Appendix No. 11—Continued

PUBLIC WORKS—CHARGEABLE TO INCOME—*Continued*

—	$ cts.	$ cts.	$ cts.
Brought forward			13,851,794 92
CONSTRUCTION, MAINTENANCE, REPAIRS, ETC.—*Con.*			
DREDGING			
Dredging—Maritime Provinces		589,954 28	
Dredging—Ontario and Quebec		494,769 63	
Dredging—Manitoba, Saskatchewan and Alberta		95,244 76	
Dredging—British Columbia		270,364 03	
			1,450,332 70
ROADS AND BRIDGES			
Dominion Roads and Bridges Generally		2,179 15	
Des Joachims, Que.—Repairs to Bridge		5,547 97	
International Bridge over St. Croix River between St. Croix, N.B., and Vanceboro, Maine, the State of Maine to contribute the sum of $2,000		2,889 34	
International Bridge over River St. John between Clair, N.B., and Fort Kent, Maine, the State of Maine to provide $130,000		43 76	
Kingston—Repairs to La Salle Causeway		1,479 94	
Matapedia Interprovincial Bridge—Renewal of flooring		4,998 40	
Ottawa—Maintenance and repairs to bridges and approaches		9,473 52	
Repairs to bridge over Grand River at York, Ontario		3,652 88	
St. Leonard—Repairs to International bridge		2,200 00	
St. Marjorique, Que.—Repairs to bridge approaches		2,494 40	
Upper Duncan River—Construction of road from Howser Lake to Haley's Landing—the Provincial Government of British Columbia to contribute a like amount		1,325 00	
			36,284 36
TELEGRAPH AND TELEPHONE LINES			
Nova Scotia—			
Cape Breton Telegraph and Telephone Lines—General repairs and improvements	9,208 74		
Boularderie—Cape Breton Telegraph Line—General repairs, repoling, etc	1,667 50		
		10,876 24	
Lower St. Lawrence and Maritime Provinces—			
Repairs to cable ship *Tyrian*		9,450 00	
Quebec—			
Reconstruction of the North Shore St. Lawrence Telegraph System from Murray Bay to Bersimis	18,560 30		
Magdalen Islands telephone service—General repairs and improvements	2,429 21		
		20,989 51	
Saskatchewan and Alberta—			
Alberta and Saskatchewan Telegraph and Telephone Lines—General repairs and improvements	11,775 98		
House River, Alta.—Telegraph building	1,178 09		
Reconstruction of Grouard—Peace River telegraph line	10,898 97		
Reconstruction of telegraph line between Cochin and Midnight Lake	10,505 00		
Telegraph line from Meadow Lake to Loon Lake	900 00		
Telephone line from Pegasus to Barnes Ferry	3,525 00		
		38,783 04	
Carried forward		80,098 79	15,338,411 98

Appendix No. 11—Continued

PUBLIC WORKS—CHARGEABLE TO INCOME—*Concluded*

—	$ cts.	$ cts.	$ cts.
Brought forward		80,098 79	15,338,411 98
CONSTRUCTION, MAINTENANCE, REPAIRS, ETC.—*Con.*			
TELEGRAPH AND TELEPHONE LINES—*Con.*			
British Columbia—			
British Columbia, Northern District—General repairs and improvements	23,820 35		
British Columbia, Vancouver Island District—General repairs and improvements	27,516 79		
Mainland Telegraph and Telephone Lines—General repairs and improvements	8,512 40		
Reconstruction of Quathiaski—Bold Point telephone line	60 00		
Telephone line from Clinton—Gang Ranch line to Alkali Lake	6,109 95		
Telephone line to Empire Valley	769 59		
Telephone line to Knouff Lake	2,599 17		
		69,388 25	
Yukon Territory—			
Yukon Telegraph System—General repairs and improvements	19,871 79		
Yukon Telegraph System—Repairs to telegraph building at Whitehorse	950 00		
		20,821 79	
			170,308 83
MISCELLANEOUS			
Accounts Branch—Salaries of agents, clerks, travelling and contingent expenses of outside service		23,603 50	
Architectural Branch—Salaries of architects, clerks of works, inspectors, draftsmen, clerks and messengers of outside service		72,047 88	
Engineering Branch—Salaries of engineers, inspectors, superintendents, draftsmen, clerks and messengers of outside service		473,556 57	
For operation and maintenance of inspection boats		14,185 18	
Maintenance and operation of water storage dams on the Ottawa River and tributaries, surveys in connection therewith, and settlement of land damages		26,352 65	
National Gallery of Canada		134,988 79	
National Monument on Connaught Place		21,964 03	
River gauging and metering		15,285 22	
Surveys and inspections		117,283 51	
Memorial Tablet to the late Dr. Alpheus Todd, former Librarian of Parliament		1,000 00	
Indemnity to John McLennan, late caretaker of the Public Building, Seaforth, Ont., in lieu of three months leave of absence with full pay previous to superannuation		345 00	
Compassionate allowance to Elizabeth Young Brown, widow of the late John Collison Brown, caretaker of the Public Building at Niagara Falls, Ont., who died from gas poisoning while on duty		2,500 00	
Compassionate allowance to Marie-Angeline Lachance, widow of the late Jos. O. Lachance, Assistant Engineer at Rimouski, Que., who died from pleurisy contracted while on Departmental duty at Matane, Quebec		2,500 00	
			905,612 33
SUBSIDIES TO DRY DOCKS (UNDER STATUTE)			
Burrard Dry Dock (North Vancouver, B.C)		112,500 00	
Collingwood Dry Dock No. 2		9,208 96	
Montreal Floating Dock		105,000 00	
Port Arthur Dry Dock		37,741 50	
Prince Rupert Floating Dock		76,970 88	
St. John Dry Dock		247,500 00	
			588,921 34
Total Public Works Chargeable to Income			17,003,254 48

Appendix No. 11—Concluded

PUBLIC WORKS—CHARGEABLE TO COLLECTION OF REVENUE

—	$ cts.	$ cts.	$ cts.
Sundry Works—			
Collection of Public Works Revenue	1,626 43		
Graving Docks	166,132 41		
Harbours and Rivers	48,647 30		
		216,406 14	
Telegraph and Telephone Lines—			
Alberta and Saskatchewan	113,280 90		
British Columbia—Mainland	59,824 60		
British Columbia—Northern District	71,700 05		
British Columbia—Vancouver Island District	128,932 87		
Lower St. Lawrence and Maritime Provinces	203,174 31		
Prince Edward Island and the Mainland	6,946 66		
Telegraph and Telephone Service—Generally	5,493 74		
Yukon System Main Line (Ashcroft-Dawson)	134,226 05		
		723,579 18	
			939,985 32

Appendix No. 12

DETAILS of Expenditure of the Department of National Defence on account of Adjustment of War Claims, Militia Services, for the fiscal year ended March 31, 1929

—	$ cts.	$ cts.
Separation allowances	15,014 55	
War Service Gratuity	13,391 85	
Pay and Allowances	5,574 14	
Historical Section	22,397 85	
Ordnance Services	14,316 96	
Transport and Travelling	1,800 89	
Civilian Employees	1,149 40	
Estates of Deceased Soldiers	971 24	
Medals and Memorial Crosses	1,075 72	
Legal Expenses	1,901 13	
Postage	1,193 02	
Printing and Stationery	1,602 12	
Washington Memorial	46 00	
Canadian War Graves	20,882 18	
Seignorial Dues (St. Gabriel, Val Cartier)	10,000 00	
Miscellaneous	1,175 15	
		112,492 20

Appendix No. 13

INTEREST ON INVESTMENTS

From what source received and nature of investment	Time	To what date paid	Rate of Interest	Amount Invested	Interest Realized	
					Sterling	Currency
			p.c.	£ s. d.	£ s. d.	$ cts.
SINKING FUNDS						
Loans of 1909-34						
Canadian Securities	1 year	Oct. 1, 1928	2½	113,956 15 7	3,348 18 4	16,298 06
	1 year	Jan. 1, 1929	3	288,832 16 4	8,664 19 8	42,169 58
	½ year	June 1, 1928	3½	1,296,778 5 9	22,693 12 4	110,442 27
	½ year	Dec. 1, 1928	3½	1,335,982 4 5	23,379 13 9	113,781 14
	1 year	Jan. 1, 1929	3½	943,554 5 5	33,024 8 0	160,718 74
	1 year	Oct. 1, 1928	4	251,775 4 8	10,071 0 2	49,012 24
					101,182 12 3	492,422 03
Loan of 1930-50						
Canadian Securities	1 year	Oct. 1, 1928	2½	122,666 4 5	3,066 13 2	14,924 40
	½ year	July 1, 1928	3	617,009 10 9	9,255 2 10	45,041 69
	½ year	Jan. 1, 1929	3	693,441 1 1	10,401 12 4	50,621 20
	½ year	June 1, 1928	3½	194,342 7 8	3,400 19 10	16,551 49
	½ year	Dec. 1, 1928	3½	217,063 17 5	3,798 12 4	18,486 60
	½ year	July 1, 1928	3½	2,726,935 14 11	47,721 7 8	232,244 07
	½ year	Jan. 1, 1929	3½	2,798,100 2 2	48,966 15 0	238,304 85
	1 year	Oct. 1, 1928	4	928,601 2 1	37,144 0 10	180,767 66
					163,755 4 0	796,941 96
Loan of 1940-60						
Canadian Securities	1 year	Oct. 1, 1928	2½	109,351 11 6	2,733 15 10	13,304 46
	½ year	July 1, 1928	3	360,325 14 9	5,404 17 8	26,303 76
	½ year	Jan. 1, 1929	3	382,957 17 2	5,744 7 4	27,955 92
	½ year	June 1, 1928	3½	130,868 16 2	2,290 4 1	11,145 66
	½ year	Dec. 1, 1928	3½	139,960 0 7	2,449 6 0	11,919 93
	½ year	July 1, 1928	3½	1,126,125 1 0	19,707 3 7	95,908 27
	½ year	Jan. 1, 1929	3½	1,192,515 5 5	20,869 0 4	101,562 55
	1 year	Oct. 1, 1928	4	658,819 10 10	26,352 15 10	128,250 25
					85,551 10 8	416,350 80
					350,489 6 11	1,705,714 79
				$ cts.	$ cts.	
Canadian Securities—						
War Loan, 1916-31	½ year	Oct. 1, 1928	5	779,300 00	19,982 50	
War Loan 1917-37	1 year	Mar. 1, 1929	5	379,800 00	18,990 00	
						38,972 50
Total Sinking Funds						1,744,687 29
LOANS TO BANKS						
Under the Finance Act, Chap. 70, R.S. 1927	Various		various	83,500,000 00		1,671,907 71
Carried forward						3,416,595 00

Appendix No. 13—Continued

INTEREST ON INVESTMENTS—*Continued*

From what source received and nature of investment	Time	To what date paid	Rate of Interest	Amount Invested	Interest Realized	Total
			p.c.	$ cts.	$ cts.	$ cts.
Brought forward.....						3,416,595 00
LOANS TO PROVINCES						
British Columbia.....	1 year.	Dec. 31, 1928	5	1,701,500 00	.....	85,075 00
Manitoba.....	1 year.	Dec. 1, 1928	5	1,205,000 00	60,250 00	
	1 year.	Feb. 15, 1929	5	395,000 00	19,750 00	
	144 days	April 23, 1928	5	60,000 00	1,183 56	
						81,183 56
New Brunswick.....	1 year.	Oct. 16, 1928	5	497,000 00	24,850 00	
	1 year.	Jan. 22, 1929	5	468,000 00	23,416 03	
	½ year.	June 28, 1928	5	285,000 00	7,125 00	
	½ year.	Dec. 28, 1928	5	268,000 00	6,700 00	
						62,091 03
Nova Scotia.....	½ year.	May 11, 1928	5	300,000 00	3,861 98	
	½ year.	Nov. 11, 1928	5	300,000 00	1,117 81	
	1 year.	Nov. 20, 1928	5	200,000 00	10,000 00	
	1 year.	Feb. 19, 1929	5	200,000 00	10,000 00	
	½ year.	Aug. 28, 1928	5	300,000 00	7,500 00	
	½ year.	Feb. 28, 1929	5	298,630 00	7,465 75	
	1 year.	Mar. 15, 1929	5	500,000 00	25,000 00	
	1 year.	April 2, 1929	5	37,000 00	1,850 00	
	26 days.	Dec. 7, 1928	5	300,000 00	106 85	
						66,902 39
Prince Edward Island.....	1 year.	Oct. 17, 1928	5	50,000 00	.....	2,500 00
Quebec.....	Various.	Dec. 31, 1928	5	7,304,202 72	.....	365,766 23
FOREIGN GOVERNMENTS						
Greek Government Loan.....	½ year.	June 30, 1928	5	7,280,000 00	182,000 00	
	½ year.	Dec. 31, 1928	5	7,180,000 00	179,500 00	
						361,500 00
Roumanian Government Loan	1 year.	April 1, 1929	4	23,969,720 00	.....	958,780 00
HARBOUR COMMISSIONS						
Montreal Harbour Debentures.....	1 year.	Jan. 1, 1929	3	8,250,000 00	247,500 00	
	1 year.	Jan. 1, 1929	3½	17,235,000 00	603,225 00	
	½ year.	July 1, 1928	5	22,225,000 00	555,625 00	
	Various.	July 1, 1928	5	1,270,000 00	18,651 36	
	½ year.	Jan. 1, 1929	5	23,495,000 00	587,375 00	
	Various.	Jan. 1, 1929	5	1,370,000 00	11,072 58	
						2,023,448 94
Vancouver Harbour Debentures.....	½ year.	July 1, 1928	5	15,352,900 00	383,822 50	
	Various.	July 1, 1928	5	1,742,000 00	13,327 68	
	½ year.	Jan. 1, 1929	5	17,094,900 00	427,372 50	
	Various.	Jan. 1, 1929	5	223,000 00	3,043 55	
						827,566 23
Chicoutimi Harbour Debentures.....	23 days.	July 1, 1928	5	50,000 00	157 53	
	½ year.	Jan. 1, 1929	5	50,000 00	1,250 00	
	Various.	Jan. 1, 1929	5	350,000 00	3,910 95	
						5,318 48
St. John Harbour Debentures	Various.	Jan. 1, 1929	5	389,000 00	.....	2,847 12
Carried forward.....						8,259,573 98

Appendix No. 13—Concluded

INTEREST ON INVESTMENTS—*Concluded*

From what source received and nature of investment	Time	To what date paid	Rate of Interest	Amount Invested	Interest Realized	Total
			p.c.	$ cts.	$ cts.	$ cts.
Brought forward						8,259,573 98
SEED GRAIN AND RELIEF						
Seed Grain and Relief Advances						160,100 87
SOLDIER AND GENERAL LAND SETTLEMENT						
Soldier Land Settlement Loans	Various.	Various	5		1,866,997 94	
General Land Settlement Loans	Various.	Various	5		92,719 10	
						1,959,717 04
MISCELLANEOUS						
Interest on Current Accounts with the—						
Bank of Montreal, London, England	Various.	Dec. 31, 1928			139,414 89	
Bank of Montreal, New York	Various.	Jan. 31, 1929			52,705 20	
Other Current Accounts	Various.	April 1, 1929			420,255 97	
Interest on Special Funds—						
Bank of Montreal, Montreal					10,059 96	
Canadian Government Merchant Marine—						
Interest on Ships Sold	Various.				5,334 38	
Montreal Turnpike Trust Corporation—						
Interest under Commutation Agreements	Various.	Various	6		9,430 04	
Province of Quebec Debt Account	1 year.	Jan. 1, 1929	4	1,473,609 63	58,944 38	
St. John Bridge and Railway Extension Company	1 year.	July 1, 1928	4	433,900 00	17,356 00	
Canadian National Railways—Temporary Loans	Various.	Mar. 1, 1929	various		1,134,669 16	
						1,848,169 98
						12,227,561 87

Appendix No. 14

STATEMENT of Casual Revenue paid to the Receiver General for the fiscal year ended March 31, 1929

From Whom Received and Nature of Receipts	$ cts.	$ cts.	$ cts.
Agriculture—			
Car inspection		66,278 00	
Cleaning grain		182 85	
Field inspection		354 15	
Fumigating charges		3,769 50	
Grading wool		3,808 54	
Inspection fees and health certificates		15,666 84	
Race track supervision	24,782 28		
Less—payments	19,590 36		
		5,191 92	
Refunds of previous years' expenditure		21,818 20	
Sale of produce—Experimental Farms		171,359 80	
Sale of publications		109 99	
Sale of sundries		675 94	
Seed testing charges		3,175 23	
Sundry fees		50,508 51	
			342,899 47
Archives—			
Copying			3 75
Civil Service Commission—			
Examination fees		5,830 50	
Less—Refunds of fees		420 50	
			5,410 00
External Affairs—			
Passport fees	142,019 58		
Less—Refunds of fees	1,508 62		
		140,510 96	
Refunds of previous years' expenditure		20 00	
Visa fees		600 00	
			141,130 96
Finance—			
Bank inspection	18,943 80		
Conscience money	418 00		
Departmental deposits unclaimed	32 50		
Interest on excess circulation	31,083 18		
Registration and insurance fees	5,708 33		
Registration fees—Bank Act	2,633 25		
Sale of publications	221 72		
Sale of pulp—Currency Branch	1,279 63		
Sterling exchange refunds	178 00		
Sundries	0 74		
Unclaimed savings bank cheque	5 00		
		60,504 15	
Royal Mint—			
Charges for gold bars	596 98		
Charges for gold proof-plate	19 61		
Charges for grinding rolls	6 00		
Charges for making assays	58 00		
Charges for refining gold	66,853 30		
Charges for striking medals	759 05		
Charges for work on nickel blanks	927 59		
Profit on copper coinage	70,831 53		
Profit on gold coinage	31,450 54		
Profit on nickel coinage	196,636 00		
Profit on silver coinage	76,249 86		
Refund of annuity, 1927	14,339 51		
		458,727 97	
			519,232 12
House of Commons—			
Private bills		28,169 60	
Refunds of previous years' expenditure		1 72	
			28,171 32
Carried forward			1,036,847 62

Appendix No. 14—Continued

STATEMENT of Casual Revenue paid to the Receiver General for the fiscal year ended March 31, 1929—*Continued*

From Whom Received and Nature of Receipts	$ cts.	$ cts.	$ cts.
Brought forward			1,036,847 62
Immigration and Colonization—			
Commission on telephones		1 40	
Interest on trust account		80 93	
Letter of identification fees		970 00	
Refunds of previous years' expenditure		22,869 82	
Rents		166 68	
Sale of steamship *Doric*		15,564 84	
Sale of sundries		83 28	
			39,736 95
Indian Affairs—			
Bank interest		125 04	
Collections—Repayment of loans		981 31	
Fees for white children attending Indian schools		108 40	
Interest on trust fund		84 20	
Refunds of previous years' expenditure		6,141 63	
Rents		60 22	
Sale of sundries		1,585 65	
Storage charges		44 99	
Transferred from suspense account		119 40	
			9,250 84
Interior—			
Refunds of previous years' expenditure, including empties returned	20,306 38		
Registration fees, Northwest Territories	7 50		
Registration fees, Yukon Territory	505 00		
Sale of sundries	183 00		
		21,001 88	
Less—Unclaimed estates, Yukon Territory	901 35		
Refund of a payment for lost government property	23 20		
		924 55	
			20,077 33
International Joint Commission—			
Sale of sundries			50 00
Justice—			
Adjustment of judges' salaries		0 28	
Advertising in Canada Law Reports		1,227 00	
Pecuniary claims		2,699 37	
Revenue from penitentiaries branch		7,774 06	
Refunds of previous years' expenditure		1,987 80	
Sale of Canada Law Reports		11,190 92	
Sheriff fees, Yukon Territory		49 75	
Succession duties		260 00	
			25,189 18
Labour—			
Sale of publications		78 19	
Subscriptions to the Labour Gazette		1,519 64	
			1,597 83
Marine and Fisheries—			
Marine Branch—			
Charges in connection with buoying schooner	27 50		
Conscience money	55 00		
Contractor's security of a defunct company	200 00		
Examination of masters and mates	5,181 25		
For services rendered	2,753 55		
Marine register	34 35		
Pilots' license fees	15 00		
Radio revenue	81,760 02		
Refunds of previous years' expenditure	91,752 57		
Rentals	10,748 79		
Carried forward	192,528 03		1,132,749 75

Appendix No. 14—Continued

STATEMENT of Casual Revenue paid to the Receiver General for the fiscal year ended March 31, 1929—*Continued*

From Whom Received and Nature of Receipts	$ cts.	$ cts.	$ cts.
Brought forward	192,528 03		1,132,749 75
Marine and Fisheries—Concluded			
Marine Branch—Concluded			
Sale of publications	3,985 72		
Sale of sundries	12,473 54		
Signal station dues	1,234 00		
Wireless apparatus license fees and wireless operators examination fees	271,887 12		
	482,108 41		
Less—Refunds of payments for names furnished	7 02		
		482,101 39	
Fisheries Branch—			
Fish culture	638 94		
Modus vivendi licenses	365 00		
Names furnished	88 00		
Pelagic sealing	73,236 35		
Refunds of previous years' expenditure	4,698 69		
Rentals	331 00		
Sale of publications	8 00		
Sale of sundries	2,999 42		
Truck service	3 00		
		82,368 40	
			564,469 79
Mines—			
Explosive permits	521 00		
For assays and analyses	88 00		
Refunds of previous years' expenditure	67 55		
Sale of publications	1,079 74		
Sale of peat fuel	1,654 96		
Sale of gold bars to Royal Mint	502 54		
Sale of sundries	551 00		
		4,464 79	
Less—Loss on sale of bullion		282 26	
			4,182 53
National Defence—			
Bank interest	1,577 81		
Barrack damages	172 12		
Commission on telephones	61 22		
Conscience money	125 00		
Damage to government property	28 50		
Printing maps and cheques	1,199 17		
Privileges granted	481 00		
Purchase of discharges	15,196 62		
Refunds of previous years' expenditure	10,968 72		
Rent of stores and equipment	8,804 78		
Other rents	14,172 23		
Sale of government property	1,952 00		
Sale of movables	20,370 53		
Sale of sundries	60 00		
Wireless stations	36,407 00		
		111,576 70	
Air Service—			
Air harbour licenses	360 00		
Air worthiness and stress analysis	1,005 00		
Bridge tolls	0 50		
For damages	83 17		
Hangar space and ground rentals	2,296 50		
Labour, tractor, and truck service, etc	502 68		
Landing fees and storage charges	1,911 30		
Passenger fees	129 90		
Photographic work	2,693 50		
Private pilots' license fees	462 00		
Carried forward	9,444 55	111,576 70	1,701,402 07

Appendix No. 14—Continued

STATEMENT of Casual Revenue paid to the Receiver General for the fiscal year ended March 31, 1929—*Continued*

From Whom Received and Nature of Receipts	$ cts.	$ cts.	$ cts.
Brought forward	9,444 55	111,576 70	1,701,402 07
National Defence—Concluded			
Air Service—Concluded			
Registration fees	1,070 00		
Sale of photographs	1,907 98		
Telephone tolls	34 30		
Taxes	4 13		
		12,460 96	
			124,037 66
National Revenue—			
Arrears of sales tax	11 00		
Bonded factory and warehouse fees	73,264 37		
Brokers' licenses	2,000 00		
Cartage	45,861 87		
Certified copies, manifests, etc	1,123 00		
Commission on radio, wireless and telegraph tolls	25 73		
Commission on telephones	5 95		
Conscience money	702 88		
Court costs	5,222 97		
Duty on malt	45 45		
Duty on value of necklace	2 78		
Extra services	166,551 08		
Interest on duty and sales tax	218 71		
Labels	80,806 73		
Landing certificates	0 30		
Law stamps	10,768 65		
Refunds of previous years' expenditure	8,625 37		
Rents	92 25		
Replaced stamps	90 84		
Sale of sundries	2,262 49		
Sale of unclaimed goods	2,864 77		
Storage charges	43,026 75		
Sundry fees	18 15		
Tobacco stamping	173 67		
Unclaimed bank balances, excess cash on hand, etc	288 33		
		444,054 09	
Less—Outstanding cheques	449 00		
Expenses in connection with an exchequer court case	3 04		
		452 04	
		443,602 05	
Taxation Branch—			
Law costs, Income Tax	9,433 42		
Over remittance	0 02		
Refunds of previous years' expenditure	17 22		
Sale of waste paper	36 77		
Unclaimed refunds of income tax	707 00		
		10,194 43	
			453,796 48
Patent Office—			
Refunds of previous year's expenditure			145 25
Pensions and National Health—			
Health—			
Fees—Food and drugs, analysis and license	4,310 00		
Fees—Opium, and narcotic drug, license	3,380 15		
Fees—Patent medicines, registration and license	6,605 00		
Fumigation of ships	27,298 21		
Hospital care of passengers	23,738 00		
Refunds of previous years' expenditure	431 35		
Sale of sundries	1 75		
Use of launch *Evelyn*	1,800 00		
		67,564 46	
Carried forward		67,564 46	2,279,381 46

Appendix No. 14—Continued

STATEMENT of Casual Revenue paid to the Receiver General for the fiscal year ended March 31, 1929—*Continued*

From Whom Received and Nature of Receipts	$ cts.	$ cts.	$ cts.
Brought forward		67,564 46	2,279,381 46
Pensions and National Health—Concluded			
Pensions—			
Refunds of previous years' expenditure		143,576 99	
			211,141 45
Pensions—			
Refunds of previous years' expenditure, Pensions Commission			57,433 64
Post Office—			
Refunds of previous years' expenditure			16,373 21
Printing and Stationery—			
Sale of publications		69,095 32	
Sale of waster paper		14,991 33	
Surplus in printing branch		40,583 85	
Surplus in stationery branch		46,088 12	
			170,758 62
Public Works—			
Blue prints and photographic work		6,882 91	
Commission on telephones		3,707 73	
Earnings of dredges and plants		11,855 99	
Refunds of previous years' expenditure		4,361 17	
Rents		75,489 46	
Sale of movables		16,845 12	
Sale of real estate		56,815 30	
Sale of telegraph line		50,000 00	
Water collections		152 88	
			226,110 56
Railways and Canals—			
Cartage		4 98	
Commission on telephones		34 55	
Electric current supplied		16 00	
For damages		944 07	
Interest earned		1,837 30	
Interest on railway subsidies		142,639 57	
Labour and material supplied		2,198 94	
Printing and stationery supplied		1,959 24	
Refunds of previous years' expenditure		4,183 74	
Rent of equipment		3,759 04	
Sale of publications		793 95	
Sale of sundries		2,549 76	
			160,921 14
Royal Canadian Mounted Police—			
Found money		27 00	
Policeing Saskatchewan		87,500 00	
Refunds of previous years' expenditure		158 98	
Sale of sundries		600 00	
			88,285 98
Secretary of State—			
Fees			724,508 35
Senate—			
Certified copies		856 75	
Private bills	39,009 00		
Less—refunds	3,831 10		
		35,177 90	
			36,034 65
Carried forward			3,970,949 06

Appendix No. 14—Concluded

STATEMENT of Casual Revenue paid to the Receiver General for the fiscal year ended March 31, 1929—*Concluded*

From Whom Received and Nature of Receipts	$ cts.	$ cts.	$ cts.
Brought forward			3,970,949 06
Soldier Settlement Board—			
Refunds of previous years' expenditure		130 00	
Sale of sundries		90 00	
			220 00
Trade and Commerce—			
Bank interest		48 00	
Commercial intelligence service		1,895 62	
For damage to goods in transit		49 30	
For loss of goods in transit		12 00	
Gas export license fees		50 00	
Over collection of grain inspection fees		9 18	
Refunds of previous years' expenditure		21,107 32	
Rentals		20,349 02	
Revenue from Motion Picture Bureau		25,883 29	
Sale of publications		32 20	
Sale of sundries		485 60	
Witness fees		4 00	
			69,925 53
			4,041,094 59

Appendix No. 15

STATEMENT of Fines and Forfeitures, including Seizures, for the fiscal year ended March 31, 1929

From Whom Received and Nature of Receipts	$ cts.	$ cts.	$ cts.
Agriculture—			
Animal Contagious Diseases Act		318 00	
Dairy Industry Act		3,162 15	
Fruit Act		610 00	
Live Stock Act		7,761 59	
Meat and Canned Foods Act		50 00	
Seed Act		140 00	
			12,041 74
Immigration and Colonization—			
Chinese Immigration Act		12,000 00	
Immigration Acts		60,730 00	
			72,730 00
Interior—			
Forestry Act		220 00	
Migratory Bird Act		559 93	
Northwest Territories Game Act		315 00	
Parks regulations		2,240 00	
			3,334 93
Justice—			
Clerk of the Peace, Roberval, Quebec		25 00	
Justice of the Peace, County of Saguenay, Quebec		10 00	
Justice of the Peace, Eldersley, Sask		5 95	
Peace Registrar, District of Kamouraska		6 00	
Police Magistrate, Dawson		387 00	
Police Magistrate, Sandwich, Ont		50 00	
			483 95
Labour—			
Combines Investigation Act			100,000 00
Marine and Fisheries—			
Marine Acts		3,727 85	
Fisheries Acts		14,173 42	
			17,901 27
Mines—			
Explosives Act			75 00
National Defence—			
Air regulations		80 00	
Militia Acts		70 00	
			150 00
National Revenue—			
Customs seizures	616,817 50		
Excise seizures	162,223 05		
	779,040 55		
LESS—Refunds of seizures	503,230 11		
		275,810 44	
Police Magistrate, Emerson, Man		50 00	
Seizures generally		355 79	
War Tax Act—Excise taxes		134,365 23	
		410,581 46	
Taxation Branch—			
Income Tax Act	12,996 36		
Penalty, T. 3-4-5	13,606 90		
		26,603 26	
			437,184 72
Pensions and National Health—			
Health—			
Food and Drugs Act, penalties		4,674 05	
Opium and Narcotic Drug Act, penalties		5,854 70	
Opium and Narcotic Drug Act, seizures		25 00	
Patent Medicines Act, penalties		175 00	
			10,728 75
Carried forward			654,630 36

Appendix No. 15—Concluded

STATEMENT of Fines and Forfeitures, including Seizures, for the fiscal year ended March 31, 1929—*Concluded*

From Whom Received and Nature of Receipts	$ cts.	$ cts.	$ cts.
Brought forward			654,630 36
Post Office—			
Post Office Acts			538 00
Public Works—			
Forfeited security			137 50
Railways and Canals—			
Railway Acts			47 00
Trade and Commerce—			
Electricity and Gas Act		70 00	
Gold and Silver Marking Act		25 00	
Weights and Measures Act		37 00	
			132 00
			655,484 86

Appendix No. 16

Premium, Discount and Exchange—Revenue

From What Source Received	Rate	Amount	Amount of Revenue	Total
			$ cts.	$ cts.
Premium, etc. on sundry items—				
Finance				213 38
Immigration				32 38
International Joint Commission				1 90
Justice				0 55
Marine and Fisheries				312 30
National Defence				2 52
National Revenue—Income Tax Branch				0 40
		£ s. d.		
Discount on Sterling Exchange Purchased	4·84 1/16	100,000 0 0	2,354 17	
	4·84 1/2	900,000 0 0	19,500 00	
	4·84 1/2	250,000 0 0	5,104 17	
	4·85 3/8	400,000 0 0	5,166 67	
				32,125 01
Premium on Sterling Exchange sold	4·8730	100,000 0 0	633 33	
	4·87 5/16	100,000 0 0	645 83	
	4·8740	250,000 0 0	1,833 33	
	4·87 7/16	250,000 0 0	1,927 08	
	4·8750	750,000 0 0	6,249 99	
	4·8760	250,000 0 0	2,333 33	
	4·87 1/16	684,254 6 5	6,985 08	
	4·87 3/16	250,000 0 0	2,864 58	
	4·87 1/4	1,000,000 0 0	10,833 33	
				34,305 88
Discount on Stock purchased for Sinking Funds	72	2,500 0 0	3,406 67	
	82 1/4	5,500 0 0	4,751 08	
	82 1/2	2,500 0 0	2,144 37	
	82 1/2	3,500 0 0	2,959 54	
	82 1/16	1,600 0 0	1,348 07	
	82 1/4	9,186 18 8	7,299 39	
	82 3/16	25,000 0 0	20,911 46	
	82 1/4	10,000 0 0	8,334 16	
	83	31,465 3 7	26,032 20	
	83 1/2	7,199 12 3	5,912 67	
	83 1/4	68,033 1 2	55,458 28	
	83 1/2	49,500 0 0	37,136 92	
	83 7/16	23,500 0 0	18,941 98	
	83 1/2	90,471 18 1	72,648 93	
	84	27,800 0 0	21,646 93	
	84 1/16	200 0 0	155 13	
	84 1/4	24,504 1 4	18,931 43	
	84 3/16	27,763 11 8	21,365 23	
	85 1/2	3,500 0 0	2,448 54	
	85 1/4	4,000 0 0	2,749 67	
	86	2,700 0 0	1,839 60	
	86 1/2	600 0 0	405 15	
	86 1/4	2,363 12 9	1,581 67	
	86 1/2	32,000 0 0	21,218 67	
	86 1/2	72,954 8 7	44,646 05	
	86 9/16	43,600 0 0	28,512 58	
	86 1/4	18,200 0 0	11,625 25	
	87	13,600 0 0	8,604 27	
	87 1/4	7,300 0 0	4,574 06	
	87 1/2	3,000 0 0	1,861 50	
	92 1/2	98,000 0 0	3,636 62	
	92 1/4	1,400 0 0	502 48	
	93 XD	2,675 0 0	911 28	
	93	5,700 0 0	1,941 80	
	93 1/4	2,000 0 0	669 17	
	93 1/2	12,316 12 10	4,046 02	
	93 1/2	16,100 0 0	5,190 91	
	93 7/16	5,700 0 0	1,820 44	
	93 1/4	17,500 0 0	5,535 83	
	93 1/2	6,000 0 0	1,861 50	
Carried forward			485,567 50	66,994 32

Appendix No. 16—Concluded

PREMIUM, DISCOUNT AND EXCHANGE—REVENUE—*Concluded*

From What Source Received	Rate	Amount	Amount of Revenue	Total
		£ s. d.	$ cts.	$ cts.
Brought forward			485,567 50	66,994 32
Discount on Stock purchased for Sinking Funds—*Concluded*				
	93¾	1,100 0 0	327 89	
	94	100 0 0	29 20	
	94½	19,600 0 0	5,603 95	
	94 5/16	2,200 0 0	608 94	
	94⅝	3,800 0 0	1,040 25	
				493,177 73
		$ cts.		
Discount on New York Funds Purchased	¼	500,000 00	78 12	
	9/32	450,000 00	140 62	
	7/32	450,000 00	246 09	
	1/128	2,000,000 00	5,000 00	
	1/128	2,200,000 00	2,578 13	
	½	475,000 00	593 75	
	1/80	75,000 00	37 50	
				8,674 21
				568,846 26

Appendix No. 17

Superannuation Revenue

	Superannuation Fund No. 1	Superannuation Fund No. 2
	$ cts.	$ cts.
Agriculture	84 00	
Finance		54 60
House of Commons		98 00
National Revenue		223 97
Patent and Copyright Office		94 50
Post Office		460 97
Interest allowed on Fund No. 2		112,507 73
	84 00	113,439 77
Deduct—Refund Superannuation No. 1	3 00	
Payments to superannuated employees Fund No. 2		46,554 04
	81 00	66,885 73

Appendix No. 18

Superannuation Fund No. 5 for the year ended March 31, 1929

Department	Contributions	Less refunds	Net contributions	Transfers from Retirement Fund	Total
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Agriculture	120,503 93	390 35	120,113 58	8,145 21	128,258 79
Archives	7,401 74		7,401 74	159 24	7,560 98
Auditor General's Office	15,628 27	69 75	15,558 52		15,558 52
Civil Service Commission	8,335 27		8,335 27		8,335 27
External Affairs	5,061 79	11 69	5,050 10		5,050 10
Finance	18,272 57	5 26	18,267 31		18,267 31
Fisheries	21,657 81	206 54	21,451 27		21,451 27
Office of the Secretary to the Governor General	1,053 73	36	1,053 37		1,053 37
Health	24,914 01	3 81	24,910 20	433 00	25,343 20
High Commissioner's Office	2,372 56		2,372 56		2,372 56
House of Commons	11,339 26		11,339 26		11,339 26
Immigration and Colonization	65,576 09	87 05	65,489 04		65,489 04
Indian Affairs	31,237 91	54 20	31,183 71	228 29	31,412 00
Insurance	4,488 17		4,488 17		4,488 17
Interior	212,160 06	19 73	212,140 33	1,223 41	213,363 74
Justice	28,823 47	2 50	28,820 97		28,820 97
Labour	10,821 73		10,821 73		10,821 73
Library of Parliament	1,589 64		1,589 64		1,589 64
Marine	118,894 33	1,292 98	117,601 35	292 82	117,894 17
Mines	31,955 36	20 98	31,934 38	409 40	32,343 78
National Defence	58,789 44	771 89	58,017 55		58,017 55
National Revenue	330,588 75	163 91	330,424 84	962 74	331,387 58
Income Tax	80,615 85	226 41	80,389 44		80,389 44
Patent and Copyright Office	7,344 31		7,344 31		7,344 31
Board of Pension Commissioners	4,840 93		4,840 93		4,840 93
Post Office	622,835 13	2,731 83	620,103 30	4,240 72	624,344 02
Printing and Stationery	33,868 88		33,868 88		33,868 88
Privy Council	1,550 06		1,550 06		1,550 06
Public Works	129,092 93	238 25	128,854 68	463 21	129,317 89
Railways and Canals	65,616 01	132 51	65,483 50	293 18	65,776 68
Royal Canadian Mounted Police	5,182 80		5,182 80		5,182 80
Secretary of State	4,792 26		4,792 26		4,792 26
Senate	3,447 40	1 00	3,446 40		3,446 40
Soldiers' Civil Re-establishment	13,626 71		13,626 71		13,626 71
Soldier Settlement Board	1,302 60		1,302 60		1,302 60
Trade and Commerce	115,723 17	150 61	115,572 56	1,822 45	117,395 01
	2,221,304 93	6,581 61	2,214,723 32	18,673 67	2,233,396 99

	Dr.	Cr.
	$ cts.	$ cts.
By Balance April 1, 1928		19,881,701 96
By Contributions less refunds		2,214,723 32
By Contributions recovered from retired employees		18,200 22
By Retirement Fund transfers		18,673 67
By Interest at 4% to March 31, 1929		824,702 48
By Transfer from Consolidated Fund		1,681,700 44
To Annuities paid to March 31, 1929	552,709 96	
To Gratuities paid to March 31, 1929	50,430 95	
To Withdrawals paid to March 31, 1929	89,579 38	
To Balance carried to fiscal year 1929–30	23,946,981 80	
	24,639,702 09	24,639,702 09
By Balance March 31, 1929		23,946,981 80

Appendix No. 19

STATEMENT showing the Loans authorized, amounts issued and redeemed and the balance negotiable under the several acts of Parliament on March 31, 1929.

—	Dr.	$ cts.	—	Cr.	$ cts.
1928					
April 1.	To Balance.....	177,638,370 57			
	To payments over receipts in Savings Bank.....	2,728,006 52	1929 Mar. 31	By Balance negotiable....	180,366,377 09
		180,366,377 09			180,366,377 09
1929					
April 1	To Balance negotiable.....	180,366,377 09			

Appendix No. 20

Number and Total Annual Salaries of Officials under the Superannuation Acts and Retirement Act on March 31, 1929

Department	Number of Officials					Annual Salaries					Total annual salaries by Department
	Superannuation Fund No. 1	Superannuation Fund No. 2	Superannuation Fund No. 5	Retirement Fund	Total	Superannuation Fund No. 1	Superannuation Fund No. 2	Superannuation Fund No. 5	Retirement Fund	Total	
						$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Agriculture—Inside	1		292	110	403	2,800 00		574,700 00	194,720 00	772,220 00	
Outside			838	401	1,239			1,624,474 00	827,747 00	2,452,221 00	3,224,441 00
Archives—Inside			42	3	45			99,220 00	3,900 00	103,120 00	
Outside			18	4	22			32,460 00	6,000 00	38,460 00	141,580 00
Auditor General's Office	1		152	26	179	2,800 00		316,840 00	35,920 00	355,560 00	355,560 00
Civil Service Commission			80	38	118			155,440 00	58,930 00	214,370 00	214,370 00
External Affairs—Inside	1		43	3	47	5,220 00		84,040 00	4,800 00	94,060 00	
Outside	1		31	1	33	4,320 00		38,780 00	7,000 00	50,100 00	144,160 00
Finance—Inside	1	1	178	104	284	4,140 00	1,440 00	289,180 00	119,460 00	414,220 00	
Outside	1		44	5	50	3,240 00		83,240 00	8,940 00	95,420 00	509,640 00
Office of the Secretary to the Governor General			9		9			19,320 00		19,320 00	19,320 00
House of Commons	1	1	72	10	84	4,000 00	2,880 00	222,960 00	27,000 00	256,840 00	256,840 00
Immigration and Colonization—Inside			130	31	161			235,880 00	44,340 00	280,220 00	
Outside			439	79	518			781,730 00	132,710 00	914,440 00	1,194,660 00
Indian Affairs—Inside	2		69	7	78	4,920 00		158,185 00	6,390 00	169,495 00	
Outside			160	131	291			261,940 00	119,705 00	381,645 00	551,140 00
Insurance	1		34	2	37	4,620 00		88,540 00	2,880 00	96,040 00	96,040 00
Interior—Inside	4		1,031	187	1,222	12,360 00		2,257,368 00	308,455 00	2,578,183 00	
Outside			569	130	699			1,112,028 00	235,053 00	1,347,081 00	3,925,264 00
Justice—Inside	1		78	16	95	2,280 00		194,640 00	31,700 00	228,620 00	
Outside			237	1	238			325,000 36	3,540 00	328,540 36	557,160 36
Labour—Inside			106	13	119			197,560 00	17,940 00	215,500 00	
Outside			1		1			5,000 00		5,000 00	220,500 00
Library of Parliament			14	2	16			36,510 00	7,300 00	43,810 00	43,810 00
Marine and Fisheries—Inside			185	33	218			413,855 00	51,795 00	465,650 00	
Outside			989	120	1,109			1,626,455 00	163,249 00	1,789,704 00	2,255,354 00
Mines—Inside			236	48	284			571,221 10	94,368 98	665,590 03	
Outside			13	1	14			30,615 00	3,060 00	33,675 00	699,265 08
National Defence—Inside			317	86	403			606,418 00	110,960 00	717,378 00	
Outside			251	34	285			392,375 75	53,702 00	446,077 75	1,163,455 75

National Revenue—Inside	.....	1	275	41	317	.....	2,280 00	547,020 00	68,880 00	618,180 00	
Outside	10	7	3,147	531	3,695	21,480 00	12,350 00	5,763,420 00	895,822 50	6,693,072 50	
Income Tax Branch	.....	.....	683	.....	683	.....	.....	1,338,573 00	.....	1,338,573 00	8,649,825 50
Pensions and National Health—Inside	.....	.....	113	14	127	.....	.....	169,900 00	14,700 00	184,600 00	
Outside	.....	.....	9	.....	9	.....	.....	19,500 00	.....	19,500 00	204,100 00
Post Office—Inside	4	1	707	74	786	10,320 00	1,920 00	1,153,119 00	107,420 00	1,272,779 00	
Outside	10	9	6,416	3,076	9,511	26,900 00	16,800 00	10,354,460 00	4,947,792 00	15,345,952 00	16,618,731 00
Privy Council	.....	.....	16	1	17	.....	.....	40,450 00	465 00	40,915 00	40,915 00
Public Printing and Stationery	.....	.....	244	10	254	.....	.....	450,648 00	18,680 00	469,328 00	469,328 00
Public Works—Inside	1	.....	272	29	302	4,620 00	.....	600,110 00	42,180 00	646,910 00	
Outside	.....	.....	937	68	1,005	.....	.....	1,456,850 00	88,096 00	1,544,946 00	2,191,856 00
Railways and Canals—Inside	.....	.....	97	4	101	.....	.....	239,310 00	7,240 00	246,550 00	
Outside	.....	.....	627	76	703	.....	.....	949,747 00	98,965 00	1,048,712 00	1,295,262 00
Royal Canadian Mounted Police	.....	.....	49	3	52	.....	.....	93,640 00	4,140 00	97,780 00	97,780 00
Secretary of State	.....	.....	59	28	87	.....	.....	100,620 00	42,350 00	142,970 00	
" Patent and Copyright Office	.....	1	71	15	87	.....	2,700 00	140,900 00	19,020 00	162,620 00	305,590 00
Senate	1	.....	25	1	27	5,120 00	.....	70,380 00	3,420 00	78,920 00	78,920 00
Soldier Settlement Board	.....	.....	7	2	9	.....	.....	26,480 00	5,520 00	32,000 00	32,000 00
Trade and Commerce—Inside	1	.....	253	64	318	3,000 00	.....	453,084 90	93,480 00	549,564 90	
Outside	2	.....	782	89	873	4,800 00	.....	1,660,855 00	226,400 00	1,892,055 00	2,441,619 90
	44	21	21,447	5,752	27,264	126,940 00	40,370 00	38,465,042 11	9,366,135,48	47,998,487 59	47,998,487 59

Appendix No. 21

DECAYED PILOTS' FUND

In Account with the Dominion of Canada

1928			
April 1—Balance from March 31, 1928			$ 105,846 62
Receipts, April 1, 1928 to March 31, 1929			15,288 75
Interest on Bonds—			
War Loan 1916–31	$ 200 00		
War Loan 1917–37	125 00		
Victory Loan 1917	522 50		
Victory Loan 1919	825 00		
Refunding Loan 1923	800 00		
Refunding Loan 1926	270 00		
Province of Manitoba 6% Bonds	360 00		
Province of Ontario 5% Bonds	1,200 00		
Province of Quebec 4½% Bonds	225 00		
Province of Quebec 6% Bonds	240 00		
			4,767 50
Interest on deposit with Government			311 44
			$ 126,214 31
Less—Pensions to Pilots and Widows	$ 12,851 90		
Premium on $10,000 Victory Loan 1919 Bonds purchased at 103.15	315 00		
Interest on $10,000 Victory Loan 1919 Bonds purchased, 49 days at 5½ %	73 84		
			13,240 74
			$ 112,973 57
Gain for year $7,126.95.			
1929			
Mar. 31—Cash on deposit with Government			$ 15,973 57
Bonds held by Government as under:—			
5% War Loan 1916–31	$ 4,000 00		
5% War Loan 1917–37	2,500 00		
5½ %Victory Loan 1917	9,500 00		
5½% Victory Loan 1919	20,000 00		
5% Refunding Loan 1923	16,000 00		
4½% Refunding Loan 1926	6,000 00		
6% Province of Manitoba Bonds	6,000 00		
5% Province of Ontario Bonds	24,000 00		
4½% Province of Quebec Bonds	5,000 00		
6% Province of Quebec Bonds	4,000 00		
			$ 97,000 00
			$ 112,973 57

Appendix No. 22

HALIFAX PILOTS' PENSION FUND

In Account with the Dominion of Canada

1928			
April 1—Balance from March 31, 1928			$ 75,930 13
Receipts from April 1, 1928 to March 31, 1929			7,167 58
Interest on Bonds—			
Victory Loan 1917	$ 2,200 00		
Victory Loan 1919	550 00		
Refunding Loan 1924	157 50		
Refunding Loan 1926	810 00		
Dominion of Canada Stock, 1930-50	109 02		
		3,826 52	
Interest on deposit with Government		65 22	
			$ 86,989 45
Less—Pensions to Pilots and Widows	3,936 51		
Premium on $7,000 Refunding Loan 1926 Bonds purchased at 102.50	175 00		
Interest on $7,000 Refunding Loan 1926 Bonds purchased, 122 days at 4½%	105 29		
amount credited in error in 1927-28, should have been credited to Sydney Pilots' Pension Fund	404 10		
		4,620 90	
			$ 82,368 55
Gain for year $6,438.42.			
1929			
Mar. 31—Cash on deposit with Government			$ 6,975 22
Bonds and Stock held by Government as under:—			
5½% Victory Loan 1917	$ 40,000 00		
5½% Victory Loan 1919	10,000 00		
4½% Refunding Loan 1924	3,500 00		
4½% Refunding Loan 1926	18,000 00		
3½% 1930-50 Dominion of Canada Stock	3,893 33		
		75,393 33	
			$ 82,368 55

Appendix No. 23

ST. JOHN PILOTS' PENSION FUND

In Account with the Dominion of Canada

1928			
April 1—Balance from March 31, 1928			$ 41,646 32
Receipts from April 1, 1928 to March 31, 1929			6,664 41
Interest on Bonds—			
War Loan 1916-31	$ 50 00		
War Loan 1917-37	50 00		
Victory Loan 1919	330 00		
Refunding Loan 1924	247 50		
Refunding Loan 1926	540 00		
Province of New Brunswick Bonds	852 50		
			2,070 00
		$	50,380 73
Less—Pensions to Pilots and Widows	$ 6,945 80		
Premium on $2,000 Refunding Loan 1926 Bonds purchased at 102.50	50 00		
Interest on $2,000 Refunding Loan 1926 Bonds purchased, 122 days at 4½%	30 08		
		$	7,025 88
		$	43,354 85
Gain for year $1,708.53.			
1929			
Mar. 31—Cash on deposit with Government		$	2,354 85
Bonds held by Government as under:—			
5% War Loan 1916-31	$ 1,000 00		
5% War Loan 1917-37	1,000 00		
5½% Victory Loan 1919	6,000 00		
4½% Refunding Loan 1924	5,500 00		
4½% Refunding Loan 1926	12,000 00		
5½% Province of New Brunswick Bonds	15,500 00		
			41,000 00
		$	43,354 85

Appendix No. 24

SYDNEY PILOTS' PENSION FUND

In Account with the Dominion of Canada

1928			
April 1—Balance from March 31, 1928			$ 34,498 18
Receipts from April 1, 1928 to March 31, 1929			9,064 01
Interest on Bonds—			
War Loan 1916-31	$ 50 00		
Victory Loan 1918	110 00		
Victory Loan 1919	429 00		
Refunding Loan 1925	135 00		
Refunding Loan 1926	900 00		
			1,624 00
Interest on deposit with Government			135 50
Amount credited in error to Halifax Pilots' Pension Fund in 1927-28			404 10
		$	45,725 79
Less—Pensions to Pilots and Widows	2,984 38		
Premium on $8,000 Refunding Loan 1926 Bonds purchased at 102.50	200 00		
Interest on $8,000 Refunding Loan 1926 Bonds, 122 days at 4½%	120 33		
			3,304 71
		$	42,421 08
Gain for year $7,922.90.			
1929			
Mar. 31—Cash on deposit with Government		$	8,621 08
Bonds held by Government as under:—			
5% War Loan 1916-31	$ 1,000 00		
5½% Victory Loan 1918	2,000 00		
5½% Victory Loan 1919	7,800 00		
4½% Refunding Loan 1925	3,000 00		
4½% Refunding Loan 1926	20,000 00		
			33,800 00
		$	42,421 08

Appendix No. 25

THE CANADIAN NORTHERN RAILWAY COMPANY

IN ACCOUNT WITH THE MINISTER OF FINANCE AND RECEIVER GENERAL OF CANADA

Authorized issue of £1,622,586 19s. 9d. guaranteed by the Dominion of Canada (Chapter 11, Acts of 1908)

—	Dr.	Cr.
	$ cts.	$ cts.
By proceeds of sale of £1,263,698 19s. 9d., or $6,150,000, 3½ per cent first mortgage debenture stock sold en bloc for $ 6,000,000 00		
Less exchange at $4·862142 in transfer to Canada	5,577 08	
		5,994,422 92
By proceeds of £358,888 3½ per cent first mortgage debenture stock sold in March, 1911, at a net price to the company of 92, £330,176 19s. 2d	$ 1,606,861 19	
Less exchange in transfer to Canada	4,326 51	
		1,602,534 68
By interest accrued to Nov. 30, 1928, on deposits		443,414 02
To amount of payments made to the company under sundry certificates from the Government Engineer	7,442,346 31	
To balance	598,025 31	
	8,040,371 62	8,040,371 62
March 31, 1929, By balance		598,025 31

Appendix No. 26

THE CANADIAN NORTHERN RAILWAY COMPANY

IN ACCOUNT WITH THE MINISTER OF FINANCE AND RECEIVER GENERAL OF CANADA

Authorized issue of $45,000,000 guaranteed by the Dominion of Canada (Chapter 20, Acts of 1914)

—	Dr.	Cr.
	$ cts.	$ cts.
By advance made by Dominion Government, August to December, 1914, against pledge of $12,500,000 of 4 per cent bonds, advance being by issue of Dominion Notes at various times and subsequently confirmed by Legislation, Chap. 4-5, Geo. V, Acts of 1915		10,000,000 00
By proceeds, sale of £3,000,000 4 per cent bonds in July, 1914, at a net price to the company of 91½ £ 2,745,000 0 0	$13,359,000 00	
By profit on exchange in transfer to Canada	109,361 32	
		13,468,361 32
By proceeds, sale of £500,000 4 per cent bonds in February, 1915, at a price to the company of 91 plus accrued interest £ 455,000 0 0		
Accrued interest 7,145 6 5		
£ 462,145 6 5	$ 2,249,107 23	
To loss on exchange in transfer to Canada	8,279 55	
		2,240,827 68
By advance made by Columbia Trust Co., New York, September, 1915, against pledge of $15,333,333.34, 4 per cent bonds, said bonds being pledged as security for the repayment of notes issued by the company, due September 1, 1917, for $11,500,000. These notes were sold on a 6 per cent basis less underwriting claims, the net proceeds being		11,084,850 00
On September 1, 1917, when these notes came due to enable the company to take them up the Government advanced to the company $9,981,021.03 against security of $15,306,334 of the above 4 per cent bonds, the remaining bonds ($27,000) were sold under the option given to holders of the notes at the price of 79 per cent, and the difference in proceeds, namely 6·7075% reverted to the credit of this account being	$ 1,811 03	
By gain on exchange from New York	33 95	
		1,844 98
By interest accrued to Nov. 30, 1928		330,096 59
To amount of payments made to the company under sundry certificates from the Government Engineer	37,123,348 11	
To balance	2,632 46	
	37,125,980 57	37,125,980 57
March 31, 1929. By balance		2,632 46

Appendix No. 27

THE CANADIAN NORTHERN ONTARIO RAILWAY COMPANY

IN ACCOUNT WITH THE MINISTER OF FINANCE AND RECEIVER GENERAL OF CANADA

Authorized issue of £7,350,000 guaranteed by the Dominion of Canada
(Chapter 6, Acts of 1911)

—			Dr.	Cr.
			$ cts.	$ cts.
By proceeds of £7,000,000 3½ per cent first mortgage debenture stock sold at a net price to the company of 90¾	£ 6,352,500 0 0	$30,915,500 00		
Less exchange in transfer to Canada		1,531 34		
			.....	30,913,968 66
By advance made by the Guaranty Trust Company of New York, July, 1913, on £293,837 first mortgage debenture stock pledged as security			.....	1,001,004 71
By proceeds of sale of £33,561 in July, 1914, of this stock at a net price of 88	£ 29,533 14 0			
By advance made by Lloyds Bank Ltd., London, on £22,602 of above stock pledged as security (£70 advanced July, 1914, for each £100 of pledged securities)	15,821 8 0			
	£ 45,355 2 0	$ 220,728 15		
By profit on exchange in transfer to Canada		188 84		
			.....	220,916 99
By interest accrued to Nov. 30, 1928, on deposits			.....	1,606,914 71
To amount of payments made to the company under sundry certificates from the Government Engineer			33,005,146 44	
To balance			737,658 63	
			33,742,805 07	33,742,805 07
March 31, 1929. By balance			.....	737,658 63

Appendix No. 28

THE CANADIAN NORTHERN ALBERTA RAILWAY COMPANY

IN ACCOUNT WITH THE MINISTER OF FINANCE AND RECEIVER GENERAL OF CANADA

Authorized issue of £647,260 guaranteed by the Dominion of Canada
(Chapter 6, Acts of 1910, as amended by Chapter 8, Acts of 1912)

—		Dr.	Cr.
		$ cts.	$ cts.
By proceeds of sale of £647,260 in October, 1911, 3½ per cent first mortgage debenture stock at a net price to the company of 92, $595,479 4s. 0d	$ 2,897,998 77		
Less exchange in transfer to Canada	7,819 69		
		.....	2,890,179 08
By interest accrued to Nov. 30, 1928, on deposits		.....	85,038 85
To amount of payments made to the company under sundry certificates from the Government Engineer		2,952,897 03	
To balance		22,320 90	
		2,975,217 93	2,975,217 93
March 31, 1929. By balance		.....	22,320 90

Appendix No. 29

THE CANADIAN NORTHERN ALBERTA RAILWAY COMPANY

IN ACCOUNT WITH THE MINISTER OF FINANCE AND RECEIVER GENERAL OF CANADA

Authorized issue of £733,561 guaranteed by the Dominion of Canada
(Chapter 7, Acts of 1912)

—		Dr.	Cr.
		$ cts.	$ cts.
By proceeds of £410,959 issue, 3½ per cent debenture stock sold in November, 1912, at a net price to the company of 90, £369,863 2s. 0d	$ 1,800,000 13		
Loss on transfer to Canada	0 13		
		.....	1,800,000 00
By advances made by the Canadian Bank of Commerce, July, 1913, on the pledging of $1,350,000 3½ per cent debenture stock ($70 advanced for each $100 pledged)		.....	945,000 00
By advances made by the Guaranty Trust Company of New York, July, 1913, on £45,206 3½ per cent debenture stock pledged as security		.....	154,001 77
By interest accrued to Nov. 30, 1928, on deposits		.....	44,101 83
To amount of payments made to the company under sundry certificates from the Government Engineer		2,927,440 00	
To balance		15,663 60	
		2,943,103 60	2,943,103 60
March 31, 1929. By balance		.....	15,663 60

Appendix No. 30

INDIAN TRUST FUND

SHOWING transactions in connection with the Fund during the year ended March 31, 1929

Details	Debit	Credit
	$ cts.	$ cts.
Balance, March 31, 1928		13,203,366 84
Collections on land sales, timber and stone dues, rents, fines and fees		1,047,297 57
Interest for the year ending March 31, 1929		671,066 78
Legislative grants to supplement the funds		7,000 00
Outstanding cheques 1926-27		100 90
Expenditure during the year	1,299,428 35	
Balance March 31, 1929	13,629,403 74	
	14,928,832 09	14,928,832 09

Appendix No. 31

DOMINION NOTE CIRCULATION

Denomination	March 31, 1925	March 31, 1926	March 31, 1927	March 31, 1928	March 31, 1929
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
$ 1	16,294,009 00	16,943,453 50	17,428,020 50	18,100,000 50	19,277,084 50
2	11,617,597 50	12,231,463 50	12,609,981 50	13,039,459 50	13,825,560 50
4	34,259 00	33,547 00	33,071 00	32,635 00	32,223 00
5	1,959,850 00	428,672 50	700,147 50	294,072 50	277,612 50
50	650 00	650 00	650 00	650 00	650 00
500	1,826,000 00	1,790,500 00	1,736,000 00	1,791,500 00	1,832,000 00
1,000	3,306,000 00	3,344,000 00	4,103,000 00	4,244,000 00	4,289,000 00
1,000 Special	555,000 00	648,000 00	433,000 00	281,000 00	427,000 00
5,000 Special	24,240,000 00	16,600,000 00	9,950,000 00	7,810,000 00	7,570,000 00
50,000 Special	145,550,000 00	129,200,000 00	123,800,000 00	141,650,000 00	155,550,000 00
Fractional	1,301,036 43	1,335,494 19	1,346,145 19	1,360,548 58	1,392,463 21
Provincial	27,686 53	27,623 53	27,623 53	27,623 53	27,622 83
	206,712,088 46	182,583,404 22	172,167,639 22	188,631,489 61	204,501,216 54

Appendix No. 32

Dominion Notes Withdrawn from Circulation and Destroyed

Denominations	1924-25	1925-26	1926-27	1927-28	1928-29
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Fractionals	177,679 62	182,527 24	172,450 00	178,816 61	180,620 37
$1	19,187,105 00	21,994,944 50	20,405,923 00	21,725,052 00	21,520,633 00
$2	13,358,049 00	16,766,314 00	15,189,788 00	16,277,078 00	15,765,067 00
$4	744 00	712 00	476 00	436 00	412 00
$5	1,777,075 00	1,373,727 50	601,850 00	376,735 00	1,136,380 00
$50	400 00				
Provincials	5 00	63 00			70
$500	995,500 00	15,063,000 00	1,761,000 00	1,009,000 00	440,500 00
$1,000	1,241,000 00	10,573,000 00	14,852,000 00	2,624,000 00	5,235,000 00
$500 Special	1,000 00				
$1,000 Special	21,954,000 00	271,000 00	354,000 00	264,000 00	101,000 00
$5,000 Special	116,475,000 00	1,930,000 00	3,720,000 00	7,330,000 00	3,485,000 00
$50,000 Special	299,400,000 00	3,800,000 00	17,100,000 00	8,600,000 00	10,700,000 00
Total	474,567,557 62	71,955,288 24	74,157,487 00	58,385,117 61	58,564,613 07

Appendix No. 33

Dominion Notes Issued and Redeemed and in Circulation

Fiscal Year	Notes in circulation April 1	Notes held by Asst. Rec's General April 1	New Notes Issued during year	Notes Withdrawn and destroyed during year	Notes held by Asst. Rec's General March 31, 1929	Notes in circulation March 31, 1929
	$ cts	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
1912-13	113,443,633 40	28,406,318 75	39,949,522 50	33,648,544 00		
1913-14	112,101,885 65	35,849,045 00	44,870,977 50	34,950,615 87		
1914-15	117,795,638 53	40,075,653 75	59,054,750 00	28,243,244 62		
1915-16	157,056,118 91	31,626,678 75	55,597,250 00	25,917,736 12		
1916-17	177,943,131 54	40,284,180 00	35,370,750 00	29,468,918 75		
1917-18	183,248,986 79	40,880,156 00	152,019,000 00	32,802,120 87		
1918-19	250,798,860 92	92,547,161 00	99,791,250 00	33,345,420 25		
1919-20	298,058,697 67	111,733,154 00	45,138,500 00	39,743,428 25		
1920-21	311,032,791 92	103,254,131 50	98,964,000 00	44,957,879 50		
1921-22	277,882,884 92	191,310,159 00	34,420,500 00	44,963,245 50		
1922-23	241,461,426 42	217,188,872 00	51,144,550 00	44,502,764 00		
1923-24	242,657,765 42	222,634,319 00	462,654,950 00	347,060,482 34		
1924-25	216,625,004 33	364,261,547 75	373,319,000 00	474,567,557 62		
1925-26	206,712,088 46	272,925,906 00	65,196,500 00	71,955,288 24		
1926-27	182,583,404 22	290,295,802 00	71,558,500 00	74,157,487 00		
1927-28	172,167,639 22	298,112,580 00	45,578,500 00	58,385,117 61		
1928-29	188,631,489 61	268,842,112 00	44,152,584 00	58,564,613 07	238,560,356 00	204,501,216 54

Appendix No. 34

Silver Recoinage Statement

—	Amount withdrawn for recoinage face value	Amount withdrawn for recoinage net value	Amount recoined face value	Loss on recoinage	Gain on recoinage
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
April 30, 1914	997,735 21	988,691 57	928,539 00	60,152 57	.....
March 31, 1915	106,015 65	104,132 63	96,893 15	7,239 48	.....
March 31, 1916	156,830 00	154,243 85	143,354 10	10,889 75	.....
March 31, 1917	93,687 15	92,093 28	85,506 45	6,586 83	.....
March 31, 1918	79,205 65	77,817 03	72,131 20	5,685 83	.....
March 31, 1919	66,679 80	65,540 75	60,516 50	5,024 25	.....
March 31, 1920	58,896 35	58,134 99	57,641 00	493 99	.....
March 31, 1921	68,083 05	67,246 05	71,584 45	.....	4,338 40
March 31, 1922	273,588 05	272,614 31	133,784 15	.....	8,360 39
March 31, 1923	177,786 95	176,733 26	.....	.....	.....
March 31, 1924	148,502 35	146,538 74	.....	.....	.....
March 31, 1925	135,044 05	133,806 96	.....	.....	.....
March 31, 1926	279,057 60	277,124 80	.....	.....	.....
March 31, 1927	716,407 45	713,592 41	.....	.....	.....
March 31, 1928	524,757 65	522,001 46	185,638 75	.....	17,688 68
March 31, 1929	219,069 00	217,060 94	804,625 80	.....	75,807 27
	4,101,345 96	4,067,373 03	2,640,214 55	96,072 70	106,194 74

Balance held for Recoinage, net value, March 31, 1929: $1,437,280.52.

Appendix No. 35

Copper Recoinage Statement

—	Amount withdrawn for recoinage face value	Amount withdrawn for recoinage net value	Amount recoined face value	Loss on recoinage	Gain on recoinage
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
March 31, 1914	321 49	284 64	272 31	12 33	.....
March 31, 1915	46 50	36 23	43 78	.....	7 55
March 31, 1916	54 43	41 02	51 53	.....	10 51
March 31, 1917	75 56	58 67	72 04	.....	13 37
March 31, 1918	62 84	47 38	59 50	.....	12 12
March 31, 1919	89 02	68 22	83 82	.....	15 60
March 31, 1920	123 96	96 17	118 94	.....	22 77
March 31, 1921	157 27	124 49	262 43	.....	137 94
March 31, 1922	464 88	359 87	.....	.....	.....
March 31, 1923	347 79	286 71	1,088 50	.....	577 68
March 31, 1924	378 77	301 01	532 18	.....	264 93
March 31, 1925	311 29	250 16	595 98	.....	302 48
March 31, 1926	517 73	415 60	853 34	.....	433 37
March 31, 1927	5,403 12	5,289 13	7,863 46	.....	3,388 07
March 31, 1928	744 99	618 14	1,922 66	.....	851 62
March 31, 1929	4,221 13	4,112 99	7,051 79	.....	3,120 90
	13,320 77	12,390 43	20,872 26	12 33	9,158 91

Balance held for Recoinage, net value, March 31, 1929: $664.75.

Appendix No. 36

Dominion Notes Issued to Assistant Receivers General

Denominations	1924—25	1925—26	1926—27	1927—28	1928—29
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Fractional	185,000 00	227,500 00	177,500 00	192,500 00	210,000 00
$1	20,124,000 00	22,480,000 00	21,888,000 00	21,760,000 00	22,176,000 00
$2	13,960,000 00	17,424,000 00	15,728,000 00	16,576,000 00	16,016,584 00
$5	5,120,000 00	.....	40,000 00	.....	600,000 00
$500	520,000 00	14,595,000 00	1,875,000 00	1,200,000 00	250,000 00
$1,000	500,000 00	10,420,000 00	15,950,000 00	2,800,000 00	4,850,000 00
$1,000 Special	21,500,000 00	.....	250,000 00	800,000 00	50,000 00
$5,000 "	26,410,000 00	50,000 00	15,650,000 00	2,250,000 00	.....
$50,000 "	285,000,000 00	.....	.....	.....	.....
Total	373,319,000 00	65,196,500 00	71,558,500 00	45,578,500 00	44,152,584 00

Appendix No. 37

Statement showing One and Two Dollar Dominion Notes in Circulation—Total amount of Dominion Notes and Bank Notes in Circulation and amount of Gold held by the Receiver General, March 31, 1882, to March 31, 1929

Year	One and Two Dollar Notes in Circulation	Total Dominion Notes in Circulation	Bank Notes in Circulation	Gold held by the Receiver General*
	$ cts.	$ cts.	$ cts.	$ cts.
1882	5,675,413 00	14,315,437 77	32,947,260 04	2,149,461 92
1883	5,809,538 00	15,801,769 98	34,517,813 52	2,381,288 51
1884	5,427,385 00	16,901,296 46	30,197,882 51	2,548,794 52
1885	5,290,655 00	15,600,166 86	29,791,262 85	2,345,525 44
1886	5,195,631 00	16,858,838 28	29,959,916 55	4,060,046 84
1887	5,761,588 00	14,781,270 78	31,521,420 43	2,516,972 36
1888	5,933,659 00	15,931,679 11	31,985,285 27	3,452,022 09
1889	5,852,398 00	15,119,065 33	32,471,522 09	3,925,994 19
1890	5,974,395 00	15,228,780 65	31,704,281 61	3,017,109 53
1891	6,262,728 00	16,156,465 48	33,020,661 30	3,789,704 21
1892	6,211,976 00	16,213,525 76	32,483,965 00	3,728,463 36
1893	6,526,193 00	17,587,711 66	33,430,883 00	5,550,381 36
1894	6,362,517 00	19,548,102 45	30,702,607 00	7,624,381 36
1895	6,339,098 00	20,946,237 12	29,414,796 00	9,175,245 43
1896	6,606,214 00	18,791,747 62	30,789,457 00	7,049,897 33
1897	6,711,754 00	21,987,613 26	31,082,521 00	10,380,205 37
1898	7,306,574 00	21,142,624 76	35,930,085 00	9,779,170 97
1899	7,902,076 00	22,933,078 39	38,409,227 00	11,768,191 25
1900	8,599,618 00	24,452,442 52	43,814,918 00	10,829,263 02
1901	9,136,829 00	28,498,519 52	47,611,967 00	15,159,309 02
1902	9,546,552 00	29,868,112 05	52,442,982 00	15,939,396 55
1903	10,671,569 00	33,777,733 58	58,283,484 00	20,702,144 08
1904	11,241,646 00	39,777,381 33	59,760,119 00	27,377,814 83
1905	11,616,702 00	47,839,250 33	58,721,173 00	35,813,970 43
1906	12,697,203 00	47,201,260 22	65,991,818 00	32,617,209 02
1907	14,427,814 00	54,794,596 86	76,346,013 00	37,619,596 81
1908	14,119,524 00	60,455,991 36	69,047,892 00	41,689,751 31
1909	14,215,537 00	79,351,080 50	68,708,458 00	61,581,665 45
1910	15,728,269 00	87,134,068 50	78,265,822 00	69,736,110 85
1911	17,155,996 00	89,994,270 25	81,938,753 00	74,159,771 40
1912	19,356,015 00	113,443,633 40	95,918,404 00	98,802,395 14
1913	20,783,997 00	112,101,885 65	102,202,047 00	98,507,112 81
1914	20,605,876 00	117,795,638 53	96,848,384 00	101,161,366 18
1915	20,236,008 50	157,056,118 91	96,666,544 00	94,644,423 44
1916	21,927,267 50	177,943,131 54	114,804,604 00	120,931,622 98
1917	24,041,642 50	183,248,986 79	148,265,140 00	118,561,338 50
1918	25,771,009 50	250,798,860 92	191,058,404 00	119,941,748 92
1919	27,378,740 00	298,058,697 67	214,576,870 00	121,141,122 07
1920	29,789,653 00	311,932,791 92	225,769,628 00	104,399,455 48
1921	29,275,112 00	277,882,884 92	206,094,668 00	83,381,036 53
1922	26,722,658 50	241,461,426 42	162,651,367 00	84,249,497 86
1923	27,775,672 00	242,657,765 42	173,258,362 00	128,740,130 31
1924	28,542,907 50	216,625,004 33	170,850,556 00	102,230,239 56
1925	27,911,606 50	206,712,088 46	157,888,900 00	122,811,151 12
1926	29,174,917 00	182,583,404 22	163,952,235 00	98,418,636 91
1927	30,038,002 00	172,167,639 22	163,807,355 00	100,885,942 92
1928	31,139,460 00	188,631,489 61	176,805,067 00	96,024,272 28
1929	33,102,645 00	204,501,216 54	188,726,256 00	60,905,345 12

*Includes amount held as reserve against Savings Bank Deposits.

Appendix No. 38

STATEMENT showing Amount of Canadian Gold Coin struck by Royal Mint to March 31, 1929

—	March 31, 1913	March 31, 1914	March 31, 1915	March 31, 1916	Total
	$	$	$	$	$
Montreal	185,000	45,000	.....	.....	230,000
Toronto	280,000	.....	.....	.....	280,000
Halifax	32,500	.....	.....	.....	32,500
St. John, N.B	37,500	.....	.....	.....	37,500
Charlottetown	8,000	.....	.....	.....	8,000
Winnipeg	125,000	.....	.....	.....	125,000
Victoria	162,500	.....	.....	.....	162,500
Ottawa	898,325	2,151,410	897,170	535	3,947,440
By Mint	3,885	1,070	40,525	.....	45,480
	1,732,710	2,197,480	937,695	535	4,868,420

$ 5	1,388,060
$10	3,480,360
	4,868,420

NOTE.—First coin issued May 10, 1912

NO CANADIAN GOLD COIN ISSUED SINCE 1916

Appendix No. 39

COINAGE (in dollar and cent denomination) executed at the Royal Mint, London, and the Mint, Birmingham, for Canada, during the years 1858 to 1907; also coinage struck for New Brunswick and Nova Scotia before Confederation in 1867, and for Prince Edward Island before 1873, when that Province entered the Confederation, and coined and issued by the Royal Mint, Ottawa, January 1, 1908, to December 31, 1928.

	Year	Silver						Nickel	Bronze
		50 cents	25 cents	20 cents	10 cents	5 cents	Total		
		$	$ cts.	$	$	$	$ cts.	$	$
	1858	.....	.....	150,000	125,000	75,000	350,000 00	.....	100,000
	1859	.....	.....	.....	.....	.....	.....	.....	95,790
	1860	.....	.....	.....	.....	.....	.....	.....	1,114
	1861	.....	.....	.....	.....	.....	.....	.....	(a)10,000
	1861	.....	.....	.....	.....	.....	.....	.....	(b)10,000
	1862	.....	.....	30,000	15,000	5,000	50,000 00	.....	(a).....
	1862	.....	.....	.....	.....	.....	.....	.....	(b)10,000
	1864	.....	.....	30,000	10,000	5,000	45,000 00	.....	(a)10,000
	1864	.....	.....	.....	.....	.....	.....	.....	(b)10,000
	1870	225,000	225,000 00	.....	160,000	140,000	750,000 00	.....	.....
(j)	1871	.....	.....	.....	.....	.....	.....	.....	(c)10,000
	1871	100,000	100,000 00	.....	80,000	70,000	350,000 00	.....	.....
(j)	1872	40,000	560,000 00	.....	100,000	100,000	800,000 00	.....	.....
(j)	1874	.....	400,000 00	.....	60,000	40,000	500,000 00	.....	.....
(j)	1875	.....	250,000 00	.....	100,000	50,000	400,000 00	.....	.....
(j)	1876	.....	.....	.....	.....	.....	.....	.....	40,000
(j)	1880	.....	100,000 00	.....	150,000	150,000	400,000 00	.....	.....
(j)	1881	75,000	205,000 00	.....	95,000	75,000	450,000 00	.....	20,000
(j)	1882	.....	150,000 00	.....	100,000	50,000	300,000 00	.....	40,000
(j)	1883	.....	240,000 00	.....	30,000	30,000	300,000 00	.....	.....
	1884	.....	.....	.....	15,000	10,000	25,000 00	.....	25,000
	1885	.....	48,000 00	.....	40,000	50,000	138,000 00	.....	.....
	1886	.....	135,000 00	.....	80,000	85,000	300,000 00	.....	15,000
	1887	.....	25,000 00	.....	35,000	25,000	85,000 00	.....	15,000
	1888	30,000	100,000 00	.....	50,000	50,000	230,000 00	.....	40,000
	1889	.....	(d)16,585 00	.....	60,000	60,000	136,585 00	.....	.....
(j)	1890	10,000	50,000 00	.....	45,000	50,000	155,000 00	.....	10,000
	1891	.....	30,000 00	.....	80,000	90,000	200,000 00	.....	(i)14,525
	1892	75,500	127,500 00	.....	52,000	43,000	298,000 00	.....	12,000
	1893	.....	25,000 00	.....	50,000	85,000	160,000 00	.....	20,000
	1894	(e)14,518	55,000 00	.....	50,000	25,000	144,518 00	.....	10,000
	1895	.....	.....	.....	.....	.....	.....	.....	12,000
	1896	.....	.....	.....	65,000	75,000	140,000 00	.....	20,000
	1897	.....	.....	.....	.....	.....	.....	.....	15,000
	1898	50,000	.....	.....	72,000	95,000	217,000 00	.....	.....
(j)	1898	.....	.....	.....	.....	.....	.....	.....	10,000
	1899	25,000	(f)103,895 00	.....	120,000	150,000	398,895 00	.....	24,000
	1900	59,000	330,000 00	.....	110,000	90,000	589,000 00	.....	10,000
(j)	1900	.....	.....	.....	.....	.....	.....	.....	26,000
	1901	40,000	160,000 00	.....	120,000	100,000	420,000 00	.....	41,000
	1902	60,000	116,000 00	.....	72,000	106,000	354,000 00	.....	30,000
(j)	1902	.....	200,000 00	.....	110,000	110,000	420,000 00	.....	.....
	1903	.....	(g)211,537 50	.....	50,000	50,000	311,537 50	.....	40,000
(j)	1903	70,000	.....	.....	132,000	132,000	334,000 00	.....	.....
	1904	30,000	100,000 00	.....	100,000	120,000	350,000 00	.....	25,000
	1905	20,000	200,000 00	.....	100,000	130,000	450,000 00	.....	20,000
	1906	175,000	(h)309,460 75	.....	170,000	155,000	809,460 75	.....	41,000
	1907	150,000	522,000 00	.....	262,000	260,000	1,194,000 00	.....	24,000
(j)	1907	.....	.....	.....	.....	.....	.....	.....	8,000
	1908	7,700	22,025 00	.....	14,900	18,400	63,025 00	.....	21,604
	1909	126,600	403,900 00	.....	210,300	127,500	868,300 00	.....	39,300
	1910	243,600	660,300 00	.....	337,000	223,100	1,464,000 00	.....	42,020
	1911	162,000	622,000 00	.....	367,700	239,300	1,391,000 00	.....	54,480
	1912	150,500	622,500 00	.....	334,500	284,500	1,392,000 00	.....	50,000
	Forward	1,939,418	7,425,703 25	210,000	4,329,400	3,828,800	17,733,321 25	.....	1,071,833

Appendix No. 39—Concluded

COINAGE (in dollar and cent denomination) executed at the Royal Mint, London, and the Mint, Birmingham, for Canada, during the years 1858 to 1907; etc.—Concluded.

Year	Silver						Nickel	Bronze
	50 cents	25 cents	20 cents	10 cents	5 cents	Total		
	$	$ cts.	$	$	$	$ cts.	$	$
Brought forward	1,939,418	7,425,703 25	210,000	4,329,400	3,828,800	17,733,321 25	.....	1,071,833
1913	138,000	447,000 00	.....	326,000	264,000	1,175,000 00	.....	55,600
1914	80,500	303,500 00	.....	194,000	156,002	734,002 00	.....	35,100
1915	6,000	92,000 00	.....	68,000	40,000	206,000 00	.....	50,400
1916	190,000	439,700 00	.....	464,300	208,000	1,302,000 00	.....	110,700
1917	334,000	786,000 00	.....	508,200	234,000	1,862,200 00	.....	116,900
1918	434,000	1,056,000 00	.....	574,000	338,000	2,402,000 00	.....	131,917
1919	538,000	1,470,000 00	.....	834,044	434,000	3,276,044 00	.....	123,800
1920	122,000	262,000 00	.....	508,000	446,000	1,338,000 00	.....	200,385
1921	4,000	14,000 00	.....	40,000	70,000	128,000 00	.....	60,700
1922	.....	6,000 00	.....	18,000	.....	24,000 00	69,000	12,400
1923	.....	2,000 00	.....	26,000	.....	28,000 00	127,000	19,300
1924	.....	.....	.....	.....	.....	.....	74,500	11,900
1925	2,000	.....	.....	12,000	.....	14,000 00	126,000	22,100
1926	.....	24,000 00	.....	26,000	.....	50,000 00	168,500	28,200
1927	.....	430,000 00	.....	144,000	.....	574,000 00	249,000	37,500
1928	6,000	535,000 00	.....	326,000	.....	867,000 00	250,000	92,100
Total	3,793,918	13,292,903 25	210,000	8,397,944	6,018,802	31,713,567 25	1,064,000	2,180,835

NOTE.—*(a)* New Brunswick coinage. *(b)* Nova Scotia coinage. *(c)* Prince Edward Island coinage. *(d)* Recoined from withdrawn 20 cent pieces of the nominal value of $17,074. *(e)* Recoined from withdrawn 20 cent pieces of the nominal value of $15,000. *(f)* Including $18,895 recoined from withdrawn 20 cent pieces of the nominal value of $9,500 and worn silver coin of the estimated value of $10,500. *(g)* Partly produced from worn silver coin of the nominal value of $11,686.75. *(h)* Partly produced from the worn silver coin of the nominal value of $2,000. *(i)* Including $4,525, produced from old copper and bronze coin. *(j)* Coined at the Mint, Birmingham.

The change from large to small copper coin was made May 17, 1920.

Appendix No. 40

STATEMENT showing amount of United States silver, nickel and bronze coin and Newfoundland coin, withdrawn from circulation in Canada and exported during the period from April 1, 1910, to March 31, 1929, together with the expenditure in connection therewith.

—	Totals 1910-1928		Fiscal year 1928-29		Totals 1910-1929	
	United States	Newfoundland	United States	New foundland	United States	Newfoundland
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Ontario	6,513,668 73	11,000 00	796,613 00	4,012 00	7,310,281 73	15,012 00
Quebec	2,758,723 99	20,000 00	605,150 00	16,000 00	3,363,873 99	36,000 00
Nova Scotia	276,290 40	99,000 00	32,150 00	28,800 00	308,440 40	127,800 00
New Brunswick	366,548 71	7,000 00	32,600 00	3,550 00	399,148 71	10,550 00
Manitoba	2,125,534 07	959 00	169,165 00	1,500 00	2,294,699 07	2,459 00
British Columbia	4,671,217 26	2,000 00	639,150 00	.....	5,310,367 26	2,000 00
Alberta	785,802 17	.....	53,750 00	.....	839,552 17	.....
Saskatchewan	569,208 38	.....	24,600 00	1,000 00	593,808 38	1,000 00
Prince Edward Island	8,435 00	5,000 00	4,650 00	1,000 00	13,085 00	6,000 00
Yukon	11,901 00	.....	.....	.....	11,901 00	.....
Total	18,087,329 71	144,959 00	2,357,828 00	55,862 00	20,445,157 71	200,821 00
Commission paid	53,443 64	.....	.....	.....	53,443 64	.....
Express charges	75,823 52	939 91	13,175 48	398 69	88,999 00	1,338 60
Total	129,267 16	939 91	13,175 48	398 69	142,442 64	1,338 60

Appendix No. 41

No. 1.—Province of Alberta—Subsidy Account

Date	——	Dr.	Cr.
1928		$ cts.	$ cts.
July 1.....	By ½ year's grant for its local purposes and the support of its Government and Legislature, at the rate of 80 cents per head per annum on a population of 607,584 as authorized by Sec. 1 S.S. (1-b) B.N.A. Act, 1907. (Quinquennial Census July 1, 1926).....	.....	243,033 60
	By ½ year's grant for Government and Legislature as authorized by Sec. 1 S.S. (1-a) B.N.A. Act, 1907.....	.....	95,000 00
July 3.....	To cash.....	338,033 60	
Sept. 1.....	By ½ year's allowance in lieu of Public Lands (Quinquennial Census July 1, 1926) population between 400,000 and 800,000 as authorized by 4-5 Edw. VII, Chap. 3 (1905) Sec. 20.....	.....	281,250 00
	By ½ year's interest at 5% per annum on debt allowance of $8,107,500.00.....	.....	202,687 50
	To cash.....	483,937 50	
1929			
Jan. 1.....	By ½ year's grant for its local purposes and the support of its Government and Legislature at the rate of 80 cents per head per annum on a population of 640,700 as authorized by Sec. 1 (1-b) B.N.A. Act, 1907. (Estimated population Jan. 1, 1929).....	.....	256,280 00
	By ½ year's grant for Government and Legislature as authorized by Sec. 1, S.S. (1-a), B.N.A. Act, 1907.....	.....	95,000 00
Jan. 2.....	To cash.....	351,280 00	
Mar. 1.....	By ½ year's allowances as above.....	.....	483,937 50
	To cash.....	483,937 50	
		1,657,188 60	1,657,188 60

No. 2.—Province of British Columbia—Subsidy Account

Date	——	Dr.	Cr.
1928		$ cts.	$ cts.
July 1.....	By ½ year's grant for its local purposes and the support of its Government and Legislature, at the rate of 80 cents per head per annum on a population of 524,582 (Census 1921) as authorized by Section 1 (1-b) of B.N.A. Act, 1907.....	.....	209,832 80
	By ½ year's grant for Government and Legislature as authorized by Sec. 1, S.S. (1) of B.N.A. Act of 1907.....	.....	95,000 00
	By ½ year's allowance in lieu of lands as authorized by O.C. Windsor, 16 May, 1871.....	.....	50,000 00
	By ½ year's interest at 5% per annum on debt allowance of $583,021.40.....	.....	14,575 53
July 3.....	To cash.....	369,408 33	
1929			
Jan. 1.....	By ½ year's grant and allowances as above.....	.....	369,408 33
Jan. 2.....	To cash.....	369,408 33	
		738,816 66	738,816 66

Appendix No. 41—Continued

No. 3.—Province of Manitoba—Subsidy Account

Date	—	Dr.	Cr.
1928		$ cts.	$ cts.
July 1.....	By ½ year's grant for its local purposes and the support of its Government and Legislature, at the rate of 80 cents per head per annum on a population of 639,056 as authorized by Sec. 1 S.S. (1-b) B.N.A. Act. 1907 (Quinquennial Census July 1, 1926).....	.....	255,622 40
	By ½ year's allowance for Government and Legislature as authorized by Sec. 1 S.S. (1) B.N.A. Act, 1907.....	.....	95,000 00
	By ½ year's allowance as authorized by 2 Geo. V, Cap. 32, Sec. 5, S.S. 1, in lieu of public lands on a population between 400,000 and 800,000.		
	(½ of $562,500)..... $ 281,250 00		
	Less ½ year's swamp lands deduction of 5% on $2,769,856.66..... $69,246 41		
	Less ½ year's University Lands deduction of 5% on $300,000.00..... 7,500 00		
	76,746 41	.....	204,503 59
	By ½ year's interest at 5% per annum on $7,631,683.85 in lieu of debt as authorized by 2 Geo. V, Cap. 32, Sec. 4.....	.....	190,792 09
July 3.....	To cash.....	745,918 08	
1929			
Jan. 1.....	By ½ year's grant for its local purposes and the support of its Government and Legislature, at the rate of 80 cents per head per annum on a population of 660,000 as authorized by Sec. 1 S.S. (1-b), B.N.A. Act, 1907. (Estimated population January 1, 1929).....	.....	264,000 00
	By ½ year's grant for Government and Legislature as authorized by Sec. 1 S.S. (1) B.N.A. Act, 1907.....	.....	95,000 00
	By ½ year's allowance as authorized by 2 Geo. V, Cap. 32, Sec. 5, S.S. 1, in lieu of Public Lands on a population between 400,000 and 800,000.		
	(½ of $562,500)..... $ 281,250 00		
	Less ½ year's Swamp Lands deduction of 5% on $2,769,856.66..... $69,246 41		
	Less ½ year's University Lands deduction of 5% on $300,000.00..... 7,500 00		
	76,746 41	.....	204,503 59
	By ½ year's interest at 5% per annum on $7,631,683.85 in lieu of debt as authorized by 2 Geo. V, Cap. 32, Sec. 4.....	.....	190,792 09
Jan. 2.....	To cash.....	754,295 68	
		1,500,213 76	1,500,213 76

No. 4—Province of New Brunswick—Subsidy Account

Date	—	Dr.	Cr.
1928		$ cts.	$ cts.
July 1.....	By ½ year's grant for its local purposes and the support of its Government and Legislature, at the rate of 80 cents per head per annum on a population of 387,876 (Census 1921) as authorized by Section 1 (1-b) of B.N.A. Act 1907.....	.....	155,150 40
	By ½ year's grant for Government and Legislature as authorized by Section 1, S.S. (1-a) of B.N.A. Act, 1907.....	.....	90,000 00
	By ½ year's allowance in lieu of export duty on lumber as authorized by 36 Vic., Cap. 41, Sec. 1.....	.....	75,000 00
	By ½ year's interest at 5% per annum on debt allowance of $529,299.39.....	.....	13,232 48
July 3.....	To cash.....	333,382 88	
1929			
Jan. 1.....	By ½ year's grants and allowances as above.....	.....	333,382 88
Jan. 2.....	To cash.....	333,382 88	
		666,765 76	666,765 76

Appendix No. 41—Continued

No. 5.—Province of Nova Scotia—Subsidy Account

Date	——	Dr.	Cr.
1928		$ cts.	$ cts.
July 1	By ½ year's grant for its local purposes and the support of its Government and Legislature, at the rate of 80 cents per head per annum on a population of 523,837 (Census 1921), as authorized by Sec. 1 (1-b) of the B.N.A. Act, 1907		209,534 80
	By ½ year's grant for Government and Legislature as authorized by Section 1, S.S. (1-a) B.N.A. Act, 1907		95,000 00
	By ½ year's interest at 5% per annum on debt allowance of $1,055,433.64		26,385 84
July 3	To cash	330,920 64	
1929			
Jan. 1	By ½ year's grants and allowances as above		330,920 64
Jan. 2	To cash	330,920 64	
		661,841 28	661,841 28

No. 6.—Province of Ontario—Subsidy Account

Date	——	Dr.	Cr.
1928		$ cts.	$ cts.
July 1	By ½ year's grant for its local purposes and the support of its Government and Legislature, on a population of 2,933,662 (Census 1921) as authorized by Section 1 (1-b) of B.N.A. Act 1907—		
	2,500,000 at 80 cents per head per annum. 1,000,000 00		
	433,662 at 60 cents per head per annum. 130,098 60		1,130,098 60
	By ½ year's grant for its local purposes and the support of its Government and Legislature as authorized by Sec. 1 (1-2) of B.N.A. Act 1907		120,000 00
	By ½ year's allowance as authorized by 47 Vic., Cap. 4, of 1884		71,207 24
July 3	To Cash	1,321,305 84	
1929			
Jan. 1	By ½ year's grants and allowances as above		1,321,305 84
Jan. 2	To Cash	1,321,305 84	
		2,642,611 68	2,642,611 68

Appendix No. 41—Continued

No. 7.—Province of Prince Edward Island—Subsidy Account

Date	——	Dr.	Cr.
1928		$ cts.	$ cts.
July 1.....	By ½ year's grant for its local purposes and the support of its Government and Legislature, at the rate of 80 cents per head per annum on a population of 109,078 (Census 1891) as authorized by Section 1 (1-b) and 1 (8) of the B.N.A. Act of 1907		43,631 20
	By ½ year's grant for Government and Legislature as authorized by Sec. 1 S.S. (1-a) B.N.A. Act 1907		50,000 00
	By ½ year's grant in lieu of Public Lands O.C. Windsor, June 26th 1873 ..... 22,500 00		
	Less ½ year's deduction on Land Account Balance, being 5% per annum on $782,-402.33 as authorized by O.C. Windsor, June 26th 1873 ..... 19,560 05		2,939 95
	By ½ year's additional allowance on subsidy account as authorized by 50-51 Vic., Cap. 8, Section 1		10,000 00
	By ½ year's allowance as authorized by 1 Ed. VII, Cap. 3, Sec. 1 in settlement of Steamships Service Claim		15,000 00
	By ½ year's grant as authorized by 2 Geo. V, Sec. 2		50,000 00
	By ½ year's interest at 5% per annum on debt allowance of $775,791.83		19,394 79
July 3.....	To Prince Edward Island Railway for ½ year's interest on construction and maintenance of the Hillsboro River Bridge on the Murray Harbour Branch, as authorized by 63-64 Vic., Cap. 7	4,875 00	
July 3.....	To Cash	186,090 94	
1929			
Jan. 1.....	By grants and allowances as above		190,965 94
Jan. 2.....	To deduction as above	4,875 00	
Jan. 2.....	To Cash	186,090 94	
		381,931 88	381,931 88

No. 8.—Province of Quebec—Subsidy Account

Date	——	Dr.	Cr.
1928		$ cts.	$ cts.
July 1.....	By ½ year's grant for its local purposes and the support of its Government and Legislature, at the rate of 80 cents per head per annum on a population of 2,361,199 (Census 1921) as authorized by Sec. 1 (1-b) of the B.N.A. Act of 1907		944,479 60
	By ½ year's grant for its Government and Legislature as authorized by Section 1 (1-2) of B.N.A. Act 1907		120,000 00
	By ½ year's allowance as authorized by 47 Vic., Cap. 4, of 1884		63,730 34
July 3.....	To Cash	1,128,209 94	
1929			
Jan. 1.....	By ½ year's grants and allowances as above		1,128,209 94
Jan. 2.....	To Cash	1,128,209 94	
		2,256,419 88	2,256,419 88

Appendix No. 41—Concluded

No. 9.—Province of Saskatchewan—Subsidy Account

Date	—	Dr.	Cr.
1928		$ cts.	$ cts.
July 1.....	By ½ year's grant for its local purposes and the support of its Government and Legislature, at the rate of 80 cents per head per annum on a population of 821,500 as authorized by Section 1 (b) of the B.N.A. Act 1907, (Quinquennial Census, July 1, 1926).....	.....	328,600 00
	By ½ year's grant for Government and Legislature as authorized by Section 1 S.S. (1-a) B.N.A. Act, 1907.....	.....	110,000 00
July 3.....	To Cash.....	438,600 00	
Sept. 1.....	By ½ year's allowance in lieu of Public Lands (Quinquennial Census, July 1, 1926) population between 800,000 and 1,200,000 as authorized by 4-5 Edw. VII, Cap. 42 (1905), Sec. 20.....	.....	375,000 00
Sept. 1.....	By ½ year's interest at 5% per annum on debt allowance of $8,107,500.00.....	.....	202,687 50
	To Cash.....	577,687 50	
1929			
Jan. 1.....	By ½ year's grant for its local purposes and the support of its Government and Legislature, at the rate of 80 cents per head per annum on a population of 859,900 as authorized by Sec. 1 (b) of the B.N.A. Act, 1907 (estimated population Jan. 1, 1929).....	.....	343,960 00
	By ½ year's grant for Government and Legislature as authorized by Sec. 1 S.S. 1 (1-a) B.N.A. Act, 1907.....	.....	110,000 00
Jan. 2.....	To Cash.....	453,960 00	
Mar. 1.....	By ½ year's allowances as above.....	.....	577,687 50
	To Cash.....	577,687 50	
		2,047,935 00	2,047,935 00

Subsidy allowances from July 1867 to close of fiscal year ended March 31, 1929

Province	Allowances for Government	Allowances per head of population	Special Grants	Interest on Debt Allowances	Total
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Alberta.....	4,206,666 67	9,150,512 67	12,375,000 00	9,729,000 00	35,461,179 34
British Columbia.....	5,180,000 00	9,671,804 80	6,800,000 00	1,700,545 32	23,352,350 12
Manitoba.....	5,785,000 00	14,001,107 20	12,418,690 78	11,442,698 75	43,647,496 73
New Brunswick.....	5,960,000 00	16,177,748 80	9,030,000 00	1,265,310 20	32,433,059 00
Nova Scotia.....	6,580,000 00	21,243,040 00	826,980 00	2,918,853 27	31,568,873 27
Ontario.....	8,480,000 00	89,881,563 99	.....	4,174,031 74	102,535,595 73
Prince Edward Island.....	3,220,000 00	4,789,129 60	3,884,904 94	2,370,107 91	14,264,142 45
Quebec.....	8,080,000 00	71,979,955 20	.....	4,559,488 81	84,619,444 01
Saskatchewan.....	4,396,666 67	11,699,403 60	13,406,250 00	9,729,000 00	39,231,320 27
	51,888,333 34	248,594,265 86	58,741,825 72	47,889,036 00	407,113,460 92

REPORT

OF THE

DEPARTMENT OF NATIONAL REVENUE

CONTAINING

ACCOUNTS OF REVENUE

With Statements relative to the Imports, Exports, Excise and Income

OF THE

DOMINION OF CANADA

FOR THE FISCAL YEAR ENDED MARCH 31

1929

COMPILED FROM OFFICIAL RETURNS

OTTAWA
F. A. ACLAND
PRINTER TO THE KING'S MOST EXCELLENT MAJESTY
1929

To His Excellency the Right Honourable Viscount Willingdon, G.C.S.I., G.C.M.G., etc., etc., Governor General and Commander in Chief of the Dominion of Canada.

MAY IT PLEASE YOUR EXCELLENCY:

The undersigned has the honour to present to Your Excellency the Annual Report of the Department of National Revenue containing Tables and Statements relative to the Imports, Exports, Excise and Income of the Dominion of Canada, for the fiscal year ended 31st March, 1929, as compiled from official returns.

All of which is respectfully submitted.

W. D. EULER,
Minister of National Revenue.

OTTAWA, 30th September, 1929.

W. D. EULER, ESQ.,
Minister of National Revenue.

SIR,—I have the honour to hand you the Annual Report of the Department of National Revenue (Customs Division), containing Accounts of Revenue with statements of Imports and Exports of the Dominion of Canada for the fiscal year ended 31st March, 1929.

I have the honour to be, sir,

Your obedient servant,

(Sgd.) R. W. BREADNER,
Commissioner of Customs.

OTTAWA, 25th September, 1929.

90040—1½

PREFACE

The Customs Act contains the following provisions respecting the Annual Report of the Department of Customs:—

> "305. The Minister shall annually make to the Governor General, to be laid before Parliament within fifteen days after the meeting thereof, a report and statement of the transactions and affairs of the department during the year then next preceding."

The Inland Revenue Act also contains provisions respecting the Annual Report of the Inland Revenue Service as follows:—

> "14. The Minister shall annually make to the Governor General a report and statement of the transactions and affairs of the Department during the year then next preceding, which shall be laid before Parliament within fifteen days after the next meeting thereof."

The unrevised monthly statements of imports and exports, prepared and published under the direction of the Department of Customs from July 1, 1900, ceased to be published by this Department since March, 1918.

Detailed statements, however, showing the quantity, value, and origin of imports and the quantity, value, and destination of exports, continue to be prepared and furnished monthly by the Department of Customs from April 1, 1918, for publication by the Dominion Bureau of Statistics.

Trade statistics classified by countries, with other details, compiled from Customs returns, are now published by the Dominion Bureau of Statistics.

Part I of this report contains tables and statements relative to the Customs.

Part II of this report contains tables and statements relative to Excise.

Part III of this report contains tables relative to Income Taxes.

The difference between revenue totals in Statement Number 9, Part I and totals shown in other statements of revenue, represent the differences between actual cash received in the Department and remitted to the Receiver General, and totals shown on entries passed, and are adjusted in the next fiscal year.

PART I

CUSTOMS

TABLES AND STATEMENTS OF IMPORTS AND EXPORTS

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No. 1—STATEMENT showing the Value of Total Exports and Imports entered for Home Consumption in the Dominion, with the duty collected thereon, for the undermentioned years.

—	Total Exports	Total Imports entered for Home Consumption	Grand Total Imports entered for Home Consumption and Exports	Total Duty Collected
	$	$	$	$
Fiscal year ended June 30, 1868	57,567,888	71,985,306	129,553,194	8,819,431 63
" " 1869	60,474,781	67,402,170	127,876,951	8,298,909 71
" " 1870	73,573,490	71,237,603	144,811,093	9,462,940 44
" " 1871	74,173,618	86,947,482	161,121,100	11,843,655 75
" " 1872	82,639,663	107,709,116	190,348,779	13,045,493 50
" " 1873	89,789,922	127,514,594	217,304,516	13,017,730 17
" " 1874	89,351,928	127,404,169	216,756,097	14,421,882 67
" " 1875	77,886,979	119,618,657	197,505,636	15,361,382 12
" " 1876	80,966,435	94,733,218	175,699,653	12,833,114 48
" " 1877	75,875,393	96,300,483	172,175,876	12,548,451 09
" " 1878	79,323,667	91,199,577	170,523,244	12,795,693 17
" " 1879	71,491,255	80,341,608	151,832,863	12,939,540 66
" " 1880	87,911,458	71,782,349	159,693,897	14,138,849 22
" " 1881	98,290,823	91,611,604	189,902,427	18,500,785 97
" " 1882	102,137,203	112,648,927	214,786,130	21,708,837 43
" " 1883	98,085,804	123,137,019	221,222,823	23,172,308 97
" " 1884	91,406,496	108,180,644	199,587,140	20,164,963 37
" " 1885	89,238,361	102,710,019	191,948,380	19,133,558 99
" " 1886	85,251,314	99,602,694	184,854,008	19,448,123 70
" " 1887	89,515,811	105,639,428	195,155,239	22,469,705 83
" " 1888	90,203,000	102,847,100	193,050,100	22,209,641 53
" " 1889	89,189,167	109,673,447	198,862,614	23,784,523 23
" " 1890	96,749,149	112,765,584	209,514,733	24,014,908 07
" " 1891	98,417,296	113,345,124	211,762,420	23,481,069 13
" " 1892	113,963,372	116,978,943	230,942,318	20,550,581 53
" " 1893	118,564,352	121,705,030	240,269,382	21,161,710 93
" " 1894	117,524,949	113,093,983	230,618,932	19,379,822 32
" " 1895	113,638,803	105,252,511	218,891,314	17,887,269 47
" " 1896	121,013,852	110,587,480	231,601,332	20,219,037 32
" " 1897	137,950,253	111,294,021	249,244,274	19,891,996 77
" " 1898	164,152,683	130,698,006	294,850,689	22,157,788 49
" " 1899	158,896,905	154,051,593	312,948,498	25,794,228 75
" " 1900	191,894,723	180,804,316	372,699,039	28,889,110 13
" " 1901	196,487,632	181,237,988	377,725,620	29,106,979 89
" " 1902	211,640,286	202,791,595	414,431,881	32,425,532 31
" " 1903	225,849,724	233,790,516	459,640,240	37,110,354 59
" " 1904	213,521,235	251,464,332	464,985,567	40,954,349 14
" " 1905	203,316,872	261,925,554	465,242,426	42,024,339 92
" " 1906	256,586,630	290,360,807	546,947,437	46,671,101 18
Mar. 31, *1907	205,277,197	257,254,882	462,532,079	40,290,171 70
" " 1908	280,006,606	358,428,616	638,435,222	58,331,074 04
" " 1909	261,512,159	298,205,957	559,718,116	48,059,791 93
" " 1910	301,358,529	375,833,016	677,191,545	61,024,239 21
" " 1911	297,196,365	461,951,318	759,147,688	73,312,367 59
" " 1912	315,317,250	547,482,190	862,799,440	87,576,036 52
" " 1913	393,232,057	675,517,045	1,068,749,102	115,063,687 39
" " 1914	478,997,928	633,692,449	1,112,690,377	107,180,578 33
" " 1915	490,808,877	587,439,304	1,078,248,181	79,205,910 27
" " 1916	882,872,502	542,077,361	1,424,949,863	103,940,100 86
" " 1917	1,375,758,148	873,437,426	2,249,195,574	147,631,454 93
" " 1918	1,586,169,792	962,543,746	2,548,713,538	161,595,628 51
" " 1919	1,268,765,285	916,429,335	2,185,194,620	158,046,333 87
" " 1920	1,286,658,709	1,064,528,123	2,351,186,832	187,524,181 77
" " 1921	1,210,428,119	1,240,158,882	2,450,587,001	179,667,683 12
" " 1922	753,927,009	747,804,332	1,501,731,341	121,487,393 90
" " 1923	945,295,837	802,579,244	1,747,875,081	133,803,370 12
" " 1924	1,058,763,297	893,366,867	1,952,130,164	135,122,344 76
" " 1925	1,081,361,643	796,932,537	1,878,294,180	120,122,453 70
" " 1926	1,328,700,137	927,328,732	2,256,028,869	143,933,110 07
" " 1927	1,267,573,142	1,030,892,505	2,298,465,647	158,966,367 03
" " 1928	1,250,598,034	1,108,956,466	2,359,412,763	171,872,768 00
" " 1929	1,388,896,075	1,265,679,091	2,654,575,166	200,479,505 46

* 9 months, change of fiscal year.

No. 2—STATEMENT showing Aggregate Trade of the Dominion by Countries on the basis of Goods entered for Home Consumption and Exported.

Fiscal Year	United Kingdom	United States	France	Germany	Spain	Portugal	Italy	Nether-lands
	$	$	$	$	$	$	$	$
1873.....	107,266,624	89,808,204	2,055,195	1,176,478	502,966	266,188	229,657	229,770
1874.....	108,083,642	90,524,060	2,569,712	1,022,428	459,027	294,007	236,296	271,043
1875.....	100,379,969	80,717,803	2,154,065	839,442	390,784	236,790	214,366	260,503
1876.....	81,457,737	78,003,492	2,394,812	608,355	445,151	199,195	183,199	297,895
1877.....	81,139,708	77,087,914	1,730,062	404,918	340,757	175,425	242,942	296,860
1878.....	83,372,719	73,876,437	1,754,394	521,580	325,245	145,941	205,171	266,764
1879.....	67,288,848	70,904,720	2,247,066	552,999	394,445	161,258	181,933	210,288
1880.....	80,307,286	62,696,857	1,928,670	532,028	297,245	201,652	623,295	273,837
1881.....	97,335,378	73,570,337	2,294,043	1,019,198	446,337	165,487	234,723	440,944
1882.....	95,871,802	96,229,763	2,922,931	1,633,118	570,301	201,656	256,841	613,241
1883.....	99,197,682	97,701,056	2,934,210	1,942,851	749,897	243,192	322,554	324,800
1884.....	87,154,242	89,333,366	2,160,804	2,171,346	648,569	240,235	322,499	333,977
1885.....	83,284,482	86,903,935	2,239,890	2,385,344	481,910	227,096	255,712	361,879
1886.....	82,143,828	81,436,808	2,509,581	2,408,821	432,540	301,927	215,298	309,559
1887.....	89,534,079	82,767,265	2,415,001	3,672,985	481,289	204,671	245,560	309,920
1888.....	79,383,705	91,053,913	2,642,557	3,563,106	427,249	230,397	235,816	332,169
1889.....	80,422,515	94,059,844	2,562,893	3,836,173	420,794	238,106	186,186	414,302
1890.....	91,743,935	92,814,783	2,894,154	4,286,136	392,294	291,811	244,545	423,309
1891.....	91,328,384	94,824,352	2,565,877	4,336,232	555,917	191,148	322,808	404,532
1892.....	106,254,984	92,125,599	2,770,173	6,526,228	489,652	155,479	490,839	846,167
1893.....	107,228,906	102,144,986	3,096,164	4,567,224	387,861	135,482	661,403	656,427
1894.....	107,256,123	88,844,040	3,081,950	7,887,594	445,567	126,469	511,631	625,764
1895.....	92,988,727	95,932,197	2,920,456	5,421,135	436,580	115,921	415,919	348,164
1896.....	99,670,030	103,022,434	3,392,482	6,688,990	445,592	88,262	287,676	439,680
1897.....	106,639,690	111,022,513	3,292,047	7,538,800	436,984	88,337	333,512	480,531
1898.....	137,499,735	124,410,926	5,000,613	7,421,462	578,462	135,154	495,023	750,486
1899.....	136,151,978	138,140,687	5,447,017	9,613,025	593,660	92,937	520,684	872,941
1900.....	152,526,098	178,463,401	5,743,272	10,699,401	647,157	187,801	405,029	767,781
1901.....	148,347,120	182,867,238	6,979,352	9,162,957	897,893	181,707	642,424	984,840
1902.....	166,533,983	192,004,734	8,061,042	13,515,747	856,793	234,874	963,641	1,195,856
1903.....	190,099,222	209,389,119	7,921,647	14,380,336	962,497	293,376	837,555	1,889,869
1904.....	179,368,950	223,599,447	7,804,453	9,994,827	963,674	210,053	642,891	1,951,398
1905.....	162,301,480	240,142,642	8,570,437	7,842,068	779,482	227,281	819,610	1,505,474
1906.....	202,289,527	273,668,593	9,788,078	8,859,871	984,477	218,202	769,610	2,004,640
*1907.....	169,717,174	234,964,509	8,108,984	6,541,513	934,469	282,622	807,347	1,816,967
1908.....	229,443,627	324,173,325	11,708,641	10,537,654	1,233,571	194,121	1,131,336	2,281,420
1909.....	204,428,319	272,631,127	11,373,531	7,536,917	979,536	171,116	2,382,112	2,515,851
1910.....	244,984,407	336,652,587	12,750,192	10,436,421	1,071,719	200,253	1,722,906	3,947,842
1911.....	246,901,572	404,331,540	14,345,865	12,710,357	1,182,690	274,468	1,341,418	3,217,597
1912.....	268,760,435	476,889,112	13,868,369	14,904,919	1,387,775	329,932	1,431,913	4,206,628
1913.....	316,732,000	608,251,944	17,944,367	17,616,941	1,307,598	392,391	2,319,304	5,851,267
1914.....	354,393,642	611,245,464	18,087,097	19,019,959	1,416,132	332,862	2,745,643	8,524,262
1915.....	301,919,644	644,026,253	23,044,891	7,248,996	1,467,128	1,004,093	3,313,709	7,024,085
1916.....	543,190,036	718,918,685	42,035,283	86,304	1,252,623	264,360	11,653,559	3,621,359
1917.....	877,834,291	1,164,502,306	73,134,008	14,132	1,240,725	469,783	12,695,606	2,804,307
1918.....	942,397,682	1,233,297,045	211,859,127	27,181	907,063	253,298	4,109,492	3,517,575
1919.....	633,874,234	1,224,666,313	105,993,753	75	928,738	479,135	14,585,836	694,394
1920.....	622,319,367	1,302,230,817	72,458,218	700,081	2,649,452	510,409	17,966,261	8,048,082
1921.....	528,202,233	1,416,878,756	46,660,391	9,764,721	7,427,904	1,994,116	59,516,787	24,529,612
1922.....	417,498,536	820,062,373	21,730,443	6,633,097	2,627,903	310,170	16,727,800	13,594,985
1923.....	521,248,669	921,337,459	26,440,012	12,631,288	2,674,986	508,906	13,791,054	15,698,356
1924.....	514,747,492	1,042,899,356	34,701,358	21,677,344	2,461,361	1,275,897	20,352,765	14,885,187
1925.....	548,251,994	936,964,652	28,865,521	31,170,271	1,946,318	337,201	16,075,345	17,877,961
1926.....	672,997,353	1,095,671,872	33,202,810	40,749,955	2,918,397	470,612	15,399,591	30,628,787
1927.....	611,961,399	1,167,002,022	39,295,797	49,638,214	2,763,845	1,744,483	26,267,670	34,139,725
1928.....	598,659,210	1,216,222,493	36,511,564	59,381,143	3,188,118	1,664,489	22,987,220	44,475,273
1929.....	625,702,322	1,389,279,316	42,459,443	67,676,778	8,407,335	6,413,334	27,289,157	53,482,627

*9 months.

No. 2—STATEMENT showing Aggregate Trade of the Dominion by Countries on the basis of Goods entered for Home Consumption and Exported—*Concluded.*

Fiscal Year	Belgium	Newfoundland	West Indies	South America	China and Japan	Switzerland	Other Countries	Total
	$	$	$	$	$	$	$	$
1873	364,456	4,609,552	1,163,425	1,701,633	1,709,856	120,514	1,099,998	217,304,516
1874	534,153	2,657,547	6,086,529	1,686,508	1,263,728	139,674	927,743	216,756,097
1875	337,674	2,806,055	6,139,910	1,064,593	694,472	116,128	1,153,082	197,505,636
1876	374,880	2,675,477	5,291,433	975,762	971,314	56,168	1,764,483	175,699,653
1877	318,724	2,753,748	5,031,667	656,591	455,755	69,066	1,471,734	172,175,876
1878	805,692	2,767,347	4,397,996	669,804	486,244	61,178	1,366,532	170,523,244
1879	219,461	2,280,823	4,753,099	745,830	505,513	94,781	1,291,709	151,832,863
1880	837,897	2,002,261	6,489,257	1,073,421	931,457	94,225	1,314,429	159,693,807
1881	671,267	2,175,773	6,962,516	1,369,731	1,430,734	141,789	1,644,170	189,902,420
1882	645,568	2,468,432	7,018,956	2,314,779	1,635,717	268,093	2,134,932	214,786,133
1883	611,112	2,953,273	7,494,291	2,954,628	1,750,642	336,040	1,706,595	221,222,820
1884	746,528	2,701,120	6,726,486	2,756,371	1,970,541	242,380	2,078,676	199,587,140
1885	551,645	2,022,073	5,698,057	2,802,042	2,528,369	217,666	1,989,280	191,948,388
1886	517,472	2,139,301	5,266,042	2,111,029	2,495,703	203,085	2,363,014	184,854,009
1887	927,580	2,072,946	4,017,593	2,625,066	2,819,584	219,777	2,841,913	195,155,200
1888	505,800	1,945,426	5,870,149	2,487,240	2,261,155	194,938	2,016,480	193,050,143
1889	595,496	1,791,496	6,138,109	2,813,587	2,048,712	166,905	3,167,496	198,862,817
1890	763,146	1,655,400	5,808,189	2,555,849	2,161,816	316,923	3,162,393	209,514,733
1891	728,120	2,218,911	6,360,926	1,782,950	2,202,102	244,319	3,685,842	211,762,420
1892	573,244	2,503,963	7,638,846	1,905,346	3,300,108	193,033	5,168,657	230,942,318
1893	1,268,551	3,247,903	7,390,377	2,099,356	2,766,712	258,464	4,465,666	240,269,382
1894	1,258,692	3,633,154	7,121,172	2,264,677	3,065,768	276,065	4,220,266	230,618,932
1895	693,019	3,065,046	8,681,622	1,610,470	2,906,574	260,040	3,059,444	218,891,312
1896	1,018,789	2,333,721	4,707,243	2,063,145	3,339,429	332,405	3,771,454	231,601,334
1897	1,518,218	2,144,874	4,332,230	2,026,085	3,300,331	223,192	5,882,830	249,244,274
1898	2,204,054	2,632,184	3,829,346	2,505,195	2,829,890	357,003	4,201,156	294,850,689
1899	3,168,136	2,335,323	4,398,902	2,631,635	3,194,829	571,526	5,215,018	312,948,498
1900	4,421,716	2,804,748	4,202,119	2,423,994	2,749,759	529,976	6,726,187	372,699,039
1901	6,634,592	2,886,067	4,707,677	2,567,278	3,149,591	603,397	7,113,487	377,725,620
1902	4,156,049	3,498,482	5,472,747	3,440,987	2,555,466	780,183	11,161,301	414,431,881
1903	4,950,732	3,714,157	6,021,294	4,532,008	2,440,999	952,326	11,255,103	459,640,240
1904	4,255,930	3,975,418	8,397,290	5,613,612	3,134,959	1,392,895	13,679,770	464,985,567
1905	3,514,994	4,528,326	10,039,302	6,916,171	3,990,776	1,776,405	12,288,038	465,242,426
1906	4,175,238	4,972,281	9,944,179	9,425,735	3,684,769	2,042,635	14,119,602	546,947,437
*1907	3,553,137	3,708,200	6,935,876	8,814,147	3,001,144	1,609,063	11,736,927	462,532,079
1908	5,758,128	5,185,987	12,844,390	7,555,644	4,611,199	2,752,443	19,023,736	638,435,222
1909	5,829,033	5,190,721	12,626,749	8,262,369	4,405,402	2,195,342	19,189,991	559,718,116
1910	6,139,980	5,438,571	13,284,809	10,961,629	4,892,218	2,614,038	22,093,973	677,191,545
1911	6,387,798	5,693,035	15,603,170	12,482,760	4,255,948	3,125,583	27,293,881	759,147,683
1912	7,418,641	6,126,200	15,391,818	15,363,540	4,015,357	3,477,524	29,227,277	862,799,440
1913	8,829,175	6,785,116	16,814,434	14,881,135	6,137,859	4,312,054	40,573,517	1,068,749,102
1914	9,310,319	6,611,551	18,501,695	13,046,555	5,579,724	4,361,520	39,513,952	1,112,690,377
1915	5,135,322	5,726,336	17,507,373	11,708,498	5,159,252	3,995,701	39,966,900	1,078,248,181
1916	394,077	6,648,822	18,281,199	17,855,782	6,468,457	4,504,220	49,775,697	1,424,949,863
1917	679,618	9,018,908	27,937,171	18,916,441	10,951,591	5,172,711	43,823,976	2,249,195,574
1918	4,922,426	13,436,848	30,173,497	17,438,096	20,925,452	3,154,564	62,294,192	2,548,713,538
1919	956,588	15,013,986	33,007,398	28,412,651	30,977,454	1,788,682	93,815,383	2,185,194,620
1920	29,510,511	19,087,010	60,814,206	33,687,146	29,444,096	9,248,533	142,512,643	2,351,186,832
1921	44,966,473	20,219,013	74,880,574	37,143,190	24,648,491	15,594,889	138,159,851	2,450,587,001
1922	16,264,969	11,018,036	40,942,973	26,608,212	26,389,501	9,039,392	72,212,951	1,501,731,341
1923	17,589,177	10,155,129	46,243,954	26,729,610	28,476,204	8,272,283	96,077,994	1,747,875,081
1924	22,817,813	12,450,910	53,059,499	32,313,659	49,118,675	9,729,609	119,639,239	1,952,130,164
1925	21,730,493	14,686,371	47,037,745	40,443,339	39,412,647	8,570,661	124,923,661	1,878,294,180
1926	29,846,437	13,270,802	53,352,616	44,164,607	71,294,341	8,694,925	143,365,764	2,256,028,869
1927	31,064,887	13,462,298	52,666,531	52,471,351	59,679,059	10,104,064	146,204,302	2,298,554,500
1928	30,804,446	14,208,880	50,205,577	58,672,057	61,499,218	9,116,576	151,958,236	2,359,412,763
1929	39,465,602	14,075,861	42,001,040	58,007,919	82,369,858	8,477,905	189,466,669	2,654,575,166

*9 months.

No. 3—STATEMENT showing Value of Exports by Countries

Fiscal Year	United Kingdom	United States	France	Germany	Spain	Portugal	Italy	Netherlands
	$	$	$	$	$	$	$	$
1873	38,743,848	42,072,526	31,907	76,553	25,080	191,156	177,232	13,142
1874	45,003,882	36,244,311	267,212	65,511	960	193,463	190,211	14,905
1875	40,032,902	29,911,983	212,767	91,019	7,300	170,784	170,408	28,724
1876	40,723,477	31,933,459	553,935	125,768	9,417	127,546	142,787	30,816
1877	41,567,469	25,775,245	319,330	34,324	62,659	129,960	213,692	94,303
1878	45,941,539	25,244,898	369,391	122,254	47,816	104,028	151,861	53,750
1879	36,295,718	27,165,501	714,875	112,090	50,596	135,748	148,472	9,713
1880	45,846,062	33,349,909	812,829	82,237	60,727	165,885	163,787	102,592
1881	53,571,570	36,866,225	662,711	84,932	46,653	108,594	145,997	215,754
1882	45,274,461	47,910,711	825,573	153,114	108,082	149,744	163,755	365,198
1883	47,145,217	41,668,723	617,730	133,697	164,925	179,843	218,113	27,599
1884	43,736,227	38,840,540	390,955	195,575	144,092	172,252	247,151	15,500
1885	41,877,705	39,752,734	303,309	264,075	132,695	166,730	147,550	24,094
1886	41,542,629	36,578,769	534,363	253,298	53,075	245,450	108,601	7,587
1887	44,571,846	37,660,199	341,531	437,536	72,020	146,528	125,681	14,859
1888	40,084,984	42,572,065	397,773	198,543	52,317	155,821	55,090	378
1889	38,105,126	43,522,404	334,210	143,603	13,526	166,021	60,062	1,222
1890	48,353,694	40,522,810	278,552	507,143	69,788	207,777	81,059	1,042
1891	49,280,858	41,138,695	253,734	532,142	67,110	120,611	90,999	14,741
1892	64,906,549	38,988,027	367,539	942,698	93,476	102,370	149,280	567,879
1893	64,080,493	43,923,010	264,047	750,461	44,355	83,001	87,387	282,569
1894	68,538,856	35,809,940	544,986	2,046,052	56,274	79,363	109,188	281,058
1895	61,856,990	41,297,676	335,282	620,976	34,101	58,781	34,325	140,264
1896	66,690,288	44,448,410	581,540	757,531	83,814	41,666	56,759	139,828
1897	77,227,502	49,373,472	690,696	2,045,432	50,452	36,745	108,627	104,422
1898	104,998,818	45,705,336	1,025,262	2,837,448	89,675	87,835	73,765	376,439
1899	99,091,855	45,133,521	1,557,722	2,219,569	59,178	29,641	125,265	372,548
1900	107,736,368	68,619,023	1,374,770	1,715,903	86,456	115,016	260,456	188,199
1901	105,328,956	72,382,230	1,581,331	1,141,552	155,354	85,403	315,063	187,378
1902	117,320,221	71,197,684	1,388,848	1,692,578	161,823	105,495	236,899	320,241
1903	131,202,321	71,783,924	1,341,618	2,097,699	138,553	164,184	295,770	619,329
1904	117,591,376	72,772,932	1,597,928	1,819,223	98,578	109,346	240,963	1,035,327
1905	101,958,771	77,404,071	1,511,298	1,146,654	50,223	128,993	198,973	550,821
1906	133,094,937	97,806,552	2,120,091	1,872,557	55,686	89,598	215,855	824,768
*1907	105,135,801	79,021,480	1,409,572	1,006,605	48,315	154,438	352,842	814,977
1908	134,484,156	113,520,500	1,806,732	2,374,607	106,594	46,865	349,839	855,085
1909	133,745,375	92,604,357	3,176,096	1,476,552	45,682	48,833	1,620,773	1,242,730
1910	149,634,107	113,150,778	2,640,648	2,501,191	51,944	59,731	829,508	1,937,852
1911	136,965,111	119,396,801	2,782,092	2,663,017	27,943	88,088	379,270	1,397,019
1912	151,853,413	120,534,634	2,123,705	3,814,914	114,564	70,390	285,091	1,782,726
1913	177,982,002	167,110,382	2,564,603	3,402,394	48,628	49,142	605,719	2,741,713
1914	222,322,766	200,459,373	3,810,562	4,433,736	63,999	55,481	655,256	5,508,806
1915	211,758,863	215,409,326	14,595,705	2,162,010	489,680	788,485	1,840,910	5,254,829
1916	463,081,241	320,225,080	36,085,813	.....	634,998	56,726	10,733,288	2,563,626
1917	756,071,077	486,870,690	66,652,910	.....	331,179	209,689	11,468,599	1,569,314
1918	861,073,399	441,390,920	206,585,063	.....	98,256	14,878	3,338,305	2,463,309
1919	560,839,116	477,745,659	102,360,853	.....	213,095	367,446	14,030,724	198,985
1920	495,960,118	501,130,117	61,827,353	655,826	1,108,904	197,497	16,967,221	5,781,913
1921	314,228,671	560,701,936	27,522,329	8,217,036	5,110,725	1,476,894	57,771,457	20,291,821
1922	300,363,193	304,104,177	8,248,438	4,592,081	848,495	87,664	15,340,430	9,592,938
1923	379,918,526	380,347,721	14,175,091	10,062,879	978,076	384,878	12,189,829	10,727,688
1924	361,160,802	441,642,909	18,933,507	16,294,838	794,792	1,015,496	18,502,921	9,525,207
1925	397,168,048	427,184,643	10,404,896	24,382,660	178,096	9,413	14,144,853	12,795,119
1926	509,266,143	485,952,235	14,051,111	30,763,192	832,547	121,795	12,801,832	23,764,224
1927	448,022,334	479,331,980	15,303,475	34,608,076	543,022	1,273,457	22,823,608	26,446,057
1928	412,763,353	496,786,256	10,037,832	42,325,345	615,968	942,210	18,745,418	35,681,224
1929	431,660,941	521,267,087	16,243,747	46,879,095	5,704,260	5,735,304	23,028,832	44,465,864

*9 months

No. 3—STATEMENT showing the Value of Exports by Countries—*Concluded*

Fiscal Year	Belgium	Newfoundland	West Indies	South America	China and Japan	Australia	Other Countries	Total
	$	$	$	$	$	$	$	$
1873	17,754	2,800,555	3,988,493	1,285,434	46,466	41,822	277,954	89,789,922
1874	240,494	1,569,079	3,778,796	1,212,978	39,222	98,733	432,171	89,351,928
1875	59,563	1,901,831	3,945,506	785,797	37,046	181,938	349,411	77,886,979
1876	13,825	1,900,891	3,675,320	688,209	23,075	79,643	938,273	80,966,435
1877	66,912	2,112,106	3,788,858	651,625	37,149	185,610	836,151	75,875,393
1878	49,998	2,094,682	3,414,147	654,357	102,568	370,723	651,655	79,323,667
1879	40,430	1,641,417	3,500,670	741,442	56,551	290,762	587,270	71,491,255
1880	688,811	1,510,300	3,544,103	789,940	37,546	139,901	616,829	87,911,453
1881	258,433	1,523,469	3,147,369	732,111	19,761	146,363	580,881	98,290,828
1882	142,358	1,974,923	2,995,572	941,162	106,675	340,608	655,267	102,137,203
1883	195,705	2,187,338	3,125,031	1,489,957	105,388	375,065	451,473	98,085,804
1884	287,378	1,920,450	3,119,569	1,277,383	60,979	502,181	496,264	91,406,496
1885	72,385	1,670,968	2,535,283	1,461,206	29,918	415,887	383,822	89,238,361
1886	6,565	1,754,980	2,121,570	1,010,034	63,118	259,960	711,315	85,251,314
1887	223,729	1,718,604	2,075,411	1,426,660	69,196	269,471	362,540	89,515,811
1888	17,057	1,523,827	2,601,486	1,510,637	132,448	446,019	454,555	90,203,000
1889	64,756	1,303,335	2,759,455	1,488,999	84,174	661,208	481,051	89,189,167
1890	41,814	1,185,739	2,719,141	1,551,887	61,751	471,028	695,924	96,749,149
1891	72,672	1,467,908	3,122,770	1,063,172	78,791	589,100	523,993	98,417,296
1892	56,212	1,750,714	3,546,559	1,027,525	283,251	436,603	744,693	113,963,375
1893	669,040	2,594,633	3,145,708	1,326,743	341,140	288,352	683,413	118,564,352
1894	708,455	2,818,592	3,443,761	1,392,285	540,849	322,745	832,545	117,524,949
1895	251,402	2,325,196	3,725,426	1,303,474	378,160	417,124	853,626	113,638,803
1896	98,031	1,782,309	2,810,817	1,496,118	668,011	517,258	841,472	121,013,852
1897	354,584	1,692,798	2,643,360	1,405,359	903,922	1,418,289	894,593	137,950,253
1898	973,944	2,167,860	2,749,080	1,060,420	511,919	1,630,714	864,168	164,152,683
1899	849,413	1,808,317	3,043,963	1,456,051	425,350	1,506,138	1,218,374	158,896,905
1900	1,197,798	2,144,070	2,870,343	1,431,107	368,615	1,626,441	2,160,158	191,894,723
1901	2,806,142	2,260,499	2,905,937	1,519,190	699,569	2,311,405	1,807,623	196,487,632
1902	2,444,450	2,381,082	3,298,912	1,781,913	570,586	2,586,554	5,153,000	211,640,286
1903	2,150,505	2,516,576	3,642,176	2,542,056	501,057	2,929,861	3,924,050	225,849,724
1904	1,126,417	2,898,751	3,583,475	2,456,608	568,983	2,622,756	4,898,578	213,521,235
1905	1,739,807	3,473,713	4,401,115	2,880,552	1,520,053	2,194,223	4,157,605	203,316,872
1906	1,565,166	3,213,856	4,575,212	3,623,065	1,467,252	2,082,219	3,979,816	256,586,630
*1907	1,857,958	2,244,469	3,527,153	3,584,329	890,425	1,998,968	3,169,865	205,277,197
1908	3,377,479	3,408,518	4,543,889	4,467,584	1,705,901	2,873,461	6,085,396	280,006,606
1909	3,927,445	3,552,293	4,534,446	3,478,476	1,778,666	2,769,049	7,511,386	261,512,159
1910	2,900,092	3,970,952	5,948,245	4,744,524	1,910,724	3,583,447	7,494,786	301,358,529
1911	2,773,444	3,874,775	6,567,307	5,149,771	1,149,810	3,925,592	10,056,325	297,196,365
1912	3,732,222	4,284,313	6,900,940	4,825,030	902,375	3,947,015	10,145,918	315,317,250
1913	4,808,997	4,728,142	6,237,468	4,352,278	1,881,558	3,996,387	12,722,644	393,232,057
1914	4,819,843	4,770,200	6,997,711	4,026,398	2,062,246	4,705,822	14,305,729	478,997,928
1915	3,259,359	4,481,176	6,418,479	2,114,370	1,333,404	5,552,686	15,349,595	490,808,877
1916	334,762	5,071,038	6,403,078	5,125,374	1,534,722	7,773,209	23,249,547	882,872,502
1917	664,722	6,871,100	9,192,467	5,609,604	1,700,514	6,576,725	21,969,558	1,375,758,148
1918	4,909,453	10,489,321	11,921,116	5,159,709	7,333,243	8,676,257	22,716,473	1,586,169,792
1919	950,318	11,915,152	16,706,634	14,975,550	15,404,866	14,172,817	38,866,070	1,268,765,285
1920	28,599,104	16,940,596	20,274,469	14,589,853	14,601,580	11,538,966	96,485,192	1,286,658,709
1921	40,273,105	17,332,810	21,562,715	17,786,847	11,390,321	18,171,685	88,589,767	1,210,428,119
1922	12,419,251	9,626,010	15,677,062	8,884,181	16,781,293	10,687,484	36,674,312	753,927,009
1923	12,594,390	8,756,403	16,416,128	10,622,959	19,804,493	18,818,681	49,498,095	945,295,837
1924	17,473,040	10,975,990	19,482,895	15,495,169	40,100,102	19,937,836	67,427,793	1,058,763,297
1925	16,662,627	13,043,209	21,584,987	20,347,608	29,897,711	12,040,123	81,517,650	1,081,361,643
1926	22,893,264	11,655,670	25,314,991	26,980,699	59,182,272	15,418,236	89,701,926	1,328,700,137
1927	21,401,579	11,593,697	24,031,721	32,510,306	43,467,087	18,975,110	87,241,633	1,267,573,142
1928	20,906,209	12,111,355	24,067,837	26,284,727	46,421,392	14,193,029	88,715,879	1,250,598,034
1929	27,451,064	11,562,455	20,026,719	31,534,843	66,353,245	19,480,023	117,502,596	1,388,896,075

*9 months.

No. 4—STATEMENT showing the Value of Goods entered for Home Consumption, by Countries

Fiscal Year	United Kingdom	United States	France	Germany	Spain	Portugal	Italy	Netherlands
	$	$	$	$	$	$	$	$
1873	68,522,776	47,735,678	2,023,288	1,099,925	477,886	75,032	52,425	216,628
1874	63,076,437	54,283,072	2,302,500	956,917	458,067	100,544	46,085	256,138
1875	60,347,067	50,805,820	1,941,298	748,423	383,484	66,006	43,958	231,779
1876	40,734,260	46,070,033	1,840,877	482,587	436,034	71,655	40,412	267,079
1877	39,572,239	51,312,669	1,410,732	370,594	278,098	45,465	29,250	202,557
1878	37,431,180	48,631,739	1,385,003	399,326	277,429	41,913	53,310	213,014
1879	30,993,130	43,739,219	1,532,191	440,909	343,849	25,510	33,461	200,575
1880	34,461,224	29,346,948	1,115,841	449,791	236,518	35,767	459,508	171,245
1881	43,583,808	36,704,112	1,631,332	934,266	399,684	56,893	88,726	225,190
1882	50,597,341	48,289,052	2,097,358	1,480,004	462,219	51,912	93,086	248,043
1883	52,052,465	56,032,333	2,316,480	1,809,154	584,972	63,349	104,441	297,201
1884	43,418,015	50,492,826	1,769,849	1,975,771	504,477	67,983	75,348	318,477
1885	41,406,777	47,151,201	1,935,581	2,121,269	349,215	60,366	108,162	337,785
1886	40,601,199	44,858,039	1,975,218	2,155,523	379,465	56,477	106,697	301,972
1887	44,962,233	45,107,066	2,073,470	3,235,449	409,269	58,143	119,889	295,061
1888	39,298,721	48,481,848	2,244,784	3,364,563	374,932	74,576	180,726	331,791
1889	42,317,389	50,537,440	2,228,683	3,692,570	407,268	72,085	126,124	414,080
1890	43,390,241	52,291,973	2,615,602	3,778,993	322,566	84,034	163,486	422,267
1891	42,047,526	53,685,657	2,312,143	3,804,090	488,807	70,537	241,809	389,791
1892	41,348,435	53,137,572	2,402,634	5,583,530	396,173	53,109	341,559	278,288
1893	43,148,413	58,221,976	2,832,117	3,825,763	343,506	52,481	170,564	373,858
1894	38,717,267	53,034,100	2,536,964	5,841,542	389,296	47,106	402,443	344,706
1895	31,131,737	54,634,521	2,585,174	4,794,159	402,479	57,140	381,594	243,900
1896	32,979,742	58,574,024	2,810,942	5,931,459	361,778	46,696	230,917	299,852
1897	29,412,188	61,649,041	2,601,351	6,493,368	386,532	45,592	224,885	376,109
1898	32,500,917	78,705,590	3,975,351	5,584,014	488,787	47,319	421,258	374,047
1899	37,060,123	93,007,166	3,889,295	7,393,456	534,482	63,296	395,599	500,393
1900	44,789,730	109,844,378	4,368,502	8,383,498	560,701	72,785	144,573	579,582
1901	43,018,164	110,485,008	5,398,021	7,021,405	742,539	96,304	327,361	797,462
1902	49,213,762	120,807,050	6,672,194	10,823,169	694,970	129,379	726,742	875,615
1903	58,896,901	137,605,195	6,580,029	12,282,637	823,944	129,192	541,785	1,270,540
1904	61,777,574	150,826,515	6,206,525	8,175,604	865,096	100,713	401,928	916,071
1905	60,342,709	162,738,571	7,059,139	6,695,414	729,259	98,288	620,637	954,653
1906	69,194,588	175,862,071	7,667,987	6,987,314	928,791	128,604	553,755	1,179,892
*1907	64,581,373	155,943,029	6,699,412	5,474,908	886,154	128,084	454,505	1,001,990
1908	94,959,471	210,652,825	9,901,909	8,163,047	1,126,977	147,256	781,497	1,426,335
1909	70,682,944	180,026,550	8,197,435	6,050,365	933,854	122,283	761,339	1,273,121
1910	95,350,300	223,501,809	10,109,544	7,935,230	1,019,775	140,522	893,398	2,009,990
1911	109,936,462	284,934,739	11,563,773	10,047,340	1,154,747	186,380	962,148	1,820,578
1912	116,907,022	356,354,478	11,744,664	11,090,005	1,273,211	259,542	1,146,822	2,423,902
1913	138,749,998	441,141,562	15,379,764	14,214,547	1,258,970	343,249	1,713,585	3,109,554
1914	132,070,876	410,786,091	14,276,535	14,586,223	1,352,133	277,381	2,090,387	3,015,456
1915	80,160,781	428,616,927	8,449,186	5,086,986	977,448	215,608	1,472,799	1,769,256
1916	90,108,795	398,693,720	5,949,470	86,304	617,025	207,634	920,271	1,057,733
1917	121,763,214	677,631,616	6,481,098	14,132	909,546	260,094	1,227,007	1,234,993
1918	81,324,283	791,906,125	5,274,064	27,181	808,807	238,420	771,187	1,054,176
1919	73,035,118	746,920,654	3,632,900	75	697,643	111,689	555,112	495,409
1920	126,359,249	801,100,700	10,630,865	44,255	1,540,548	312,912	999,040	2,266,169
1921	213,973,562	856,176,820	19,138,062	1,547,685	2,317,179	517,222	1,745,330	4,237,791
1922	117,135,343	515,958,196	13,482,005	2,041,016	1,779,408	222,506	1,387,370	4,002,047
1923	141,330,143	540,989,738	12,264,921	2,568,409	1,696,910	124,028	1,601,225	4,970,668
1924	153,586,690	601,256,447	15,767,851	5,382,506	1,666,569	260,401	1,849,844	5,359,980
1925	151,083,946	509,780,009	18,460,625	6,787,611	1,768,222	327,788	1,930,492	5,082,842
1926	163,731,210	608,618,542	19,151,699	9,986,763	2,085,850	348,817	2,597,759	6,864,563
1927	163,939,065	687,022,521	23,992,322	15,030,138	2,220,823	471,026	3,444,062	7,693,668
1928	185,895,857	719,436,237	26,473,732	17,055,798	2,572,150	722,279	4,241,802	8,794,049
1929	194,041,381	868,012,229	26,215,696	20,797,683	2,703,075	678,030	4,260,325	9,016,763

* 9 months.

No. 4—STATEMENT showing Value of Goods entered for Home Consumption, by Countries—*Concluded*

Fiscal Year	Belgium	Newfoundland	West Indies	South America	China and Japan	Switzerland	Other Countries	Total
	$	$	$	$	$	$	$	$
1873	346,702	1,808,997	2,174,932	416,199	1,663,390	120,514	780,222	127,514,594
1874	293,659	1,088,468	2,307,733	473,530	1,224,506	139,674	396,839	127,404,169
1875	278,311	904,224	2,194,404	278,796	657,426	116,128	621,733	119,618,657
1876	361,055	774,586	1,616,113	287,553	948,239	56,168	746,567	94,733,218
1877	251,812	641,642	1,242,809	4,971	418,606	69,066	449,973	96,300,483
1878	255,694	672,665	1,033,849	15,447	383,676	61,178	344,154	91,199,577
1879	179,031	639,406	1,252,429	4,388	448,962	94,781	413,767	80,341,608
1880	149,086	581,961	2,945,154	283,481	893,911	94,225	557,689	71,782,349
1881	412,834	652,304	3,815,147	637,620	1,410,973	141,789	916,926	91,611,604
1882	503,210	493,509	4,023,384	1,373,617	1,529,042	268,093	1,139,057	112,648,927
1883	415,407	765,935	4,369,260	1,464,671	1,645,254	336,040	880,057	123,137,019
1884	459,150	780,670	3,606,917	1,478,988	1,909,562	242,380	1,080,231	108,180,644
1885	479,260	351,105	3,162,774	1,340,836	2,493,451	217,666	1,189,571	102,710,019
1886	510,907	384,321	3,144,472	1,100,995	2,432,585	203,085	1,391,739	99,602,694
1887	703,851	354,342	1,942,182	1,198,406	2,750,388	219,777	2,209,902	105,639,428
1888	488,743	421,599	3,268,663	876,603	2,128,707	193,838	1,117,006	102,847,100
1889	530,740	488,161	3,378,654	1,324,588	1,964,538	166,890	2,025,237	109,673,447
1890	721,332	469,711	3,089,048	1,003,962	2,100,065	316,523	1,995,841	112,765,584
1891	655,448	751,003	3,238,156	719,778	2,123,311	244,319	2,572,749	113,345,124
1892	517,032	753,249	4,092,287	877,821	3,016,857	192,365	3,988,029	116,978,943
1893	599,511	653,270	4,244,669	772,613	2,425,572	258,464	3,782,253	121,705,030
1894	550,237	814,562	3,677,411	872,392	2,254,919	274,825	3,066,216	113,093,983
1895	441,617	739,850	4,794,020	469,172	2,528,414	259,400	1,789,334	105,252,511
1896	920,758	551,412	1,896,426	567,027	2,671,418	332,120	2,413,009	110,587,480
1897	1,163,632	452,076	1,678,870	620,250	2,396,409	222,173	3,571,545	111,294,021
1898	1,230,110	464,324	1,080,266	1,425,653	2,317,971	349,678	1,732,721	130,698,006
1899	2,318,723	527,006	1,354,939	1,175,584	2,769,499	568,768	2,493,264	154,051,593
1900	3,223,918	660,678	1,331,776	992,887	2,381,144	529,176	2,940,988	180,804,316
1901	3,828,450	625,568	1,801,740	1,048,088	2,450,022	602,658	2,995,198	181,237,988
1902	1,711,599	1,117,400	2,173,835	1,659,074	1,984,876	765,010	3,436,920	202,791,595
1903	2,800,182	1,197,581	2,379,275	1,989,952	1,939,942	944,727	4,408,634	233,790,516
1904	3,129,513	1,076,667	4,813,815	3,157,004	2,565,976	1,389,000	6,062,331	251,464,332
1905	1,775,187	1,054,613	5,638,187	4,035,619	2,470,723	1,766,991	5,945,564	261,925,554
1906	2,610,072	1,758,425	6,591,083	5,869,075	2,217,517	2,012,405	6,799,228	290,360,807
*1907	1,695,179	1,463,731	3,406,723	5,229,818	2,110,719	1,604,692	6,574,479	257,254,882
1908	2,380,649	1,777,469	8,300,501	3,088,066	2,905,298	2,734,779	10,082,543	358,428,616
1909	1,901,588	1,638,428	8,092,303	4,783,893	2,626,736	2,188,265	8,926,853	298,205,957
1910	3,239,888	1,467,619	7,366,564	6,217,105	2,981,494	2,603,858	11,025,920	375,833,016
1911	3,614,354	1,818,260	9,035,863	7,334,136	3,106,138	3,102,910	13,333,490	461,951,318
1912	3,686,419	1,841,887	8,490,878	10,533,310	3,112,982	3,458,006	15,159,062	547,482,190
1913	4,020,178	2,056,974	10,576,966	10,528,857	4,256,301	4,296,702	23,869,838	675,517,045
1914	4,490,476	1,841,351	11,503,984	9,020,157	3,517,478	4,314,805	20,549,116	633,692,449
1915	1,875,963	1,245,160	11,088,894	9,594,128	3,825,848	3,979,256	19,081,064	587,439,304
1916	59,315	1,577,784	11,878,121	12,730,408	4,933,735	3,525,117	19,731,929	542,077,361
1917	14,896	2,147,808	18,744,704	13,306,837	9,251,077	4,499,321	15,951,083	873,437,426
1918	12,973	2,947,527	18,252,381	12,278,387	13,592,209	3,146,482	30,909,544	962,543,746
1919	6,270	3,098,834	16,300,764	13,437,101	15,572,588	1,780,812	40,784,366	916,429,335
1920	911,407	2,146,414	40,539,737	19,097,293	14,842,516	7,758,051	35,978,967	1,064,528,123
1921	4,693,368	2,886,203	53,317,859	19,356,073	13,258,170	14,143,448	32,850,110	1,240,158,882
1922	3,845,718	1,392,026	25,265,911	17,724,031	9,608,208	8,671,608	25,288,939	747,804,332
1923	4,994,787	1,398,726	29,827,826	16,106,651	8,671,707	7,726,656	28,306,849	802,579,244
1924	5,344,773	1,474,920	33,576,604	16,818,490	9,018,573	8,420,673	33,582,546	893,366,867
1925	5,067,866	1,643,162	25,460,658	20,095,731	9,514,936	7,801,575	32,127,074	796,932,537
1926	6,953,173	1,615,132	28,037,625	17,183,908	12,112,069	7,462,608	40,579,014	927,328,732
1927	9,663,308	1,868,601	28,634,810	19,961,045	16,211,972	9,491,779	41,247,365	1,030,892,505
1928	9,898,237	2,097,525	26,137,740	32,387,330	15,077,826	8,595,677	49,570,227	1,108,956,466
1929	12,014,538	2,513,406	21,974,321	26,473,076	16,016,613	7,917,445	53,044,510	1,265,679,091

* 9 months.

No. 5—Statement showing Duty collected by Countries

Fiscal Year	United Kingdom	United States	France	Germany	Spain	Portugal	Italy	Netherlands
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
1873...	7,398,460 17	2,966,119 34	627,831 95	334,415 51	102,711 21	21,245 21	9,320 80	294,569 02
1874...	7,867,481 41	3,695,564 03	744,059 19	272,234 68	112,918 73	27,674 63	13,626 76	361,153 47
1875...	8,881,997 81	3,860,877 10	604,092 47	173,427 65	113,599 78	28,421 97	8,502 45	394,017 97
1876...	6,075,759 82	4,117,223 40	723,368 24	134,282 11	157,287 53	29,302 21	24,629 25	459,887 53
1877...	6,377,596 23	4,426,394 79	480,340 56	75,762 93	79,515 38	20,322 20	15,783 10	316,156 00
1878...	6,445,995 38	4,794,599 63	400,600 04	79,673 10	87,755 88	13,452 55	19,652 43	308,153 30
1879...	5,561,933 02	5,529,150 64	501,747 90	104,211 80	120,385 81	7,970 14	19,474 58	329,634 07
1880...	6,737,977 05	4,521,311 08	427,937 89	103,156 82	106,720 56	14,935 79	30,031 12	301,570 50
1881...	8,772,949 97	5,657,292 75	597,948 79	215,108 04	167,412 55	25,307 99	40,956 25	372,335 63
1882...	10,011,811 00	7,082,722 29	742,774 93	338,691 39	210,766 86	29,105 63	34,283 98	420,607 91
1883...	9,897,785 16	8,158,023 35	824,963 17	388,556 85	231,866 95	38,135 50	44,240 03	535,741 81
1884...	8,001,370 74	7,420,461 79	645,152 71	554,181 88	192,946 21	34,228 80	32,186 80	493,807 39
1885...	7,617,249 45	6,636,405 83	650,515 29	572,947 24	154,680 24	29,345 65	33,380 25	521,318 20
1886...	7,817,357 45	6,790,080 76	735,666 52	588,168 44	150,268 47	30,510 74	35,667 84	602,570 19
1887...	9,318,920 08	7,299,591 68	699,840 07	1,190,267 30	176,449 17	33,329 81	31,404 53	623,894 26
1888...	8,972,739 84	7,131,006 28	796,242 70	1,214,748 15	171,790 38	36,621 03	42,004 78	704,034 45
1889...	9,405,243 70	7,413,354 83	854,805 00	1,266,638 56	185,969 33	36,805 32	32,456 70	756,785 89
1890...	9,576,965 75	8,220,299 55	957,312 22	1,165,158 67	170,028 06	36,528 91	37,938 11	806,261 40
1891...	9,114,271 75	7,709,318 12	932,032 53	1,320,583 23	217,612 94	30,680 47	44,888 99	741,462 43
1892...	9,074,200 71	7,814,666 93	931,044 99	783,740 50	186,168 39	27,446 98	35,846 83	697,184 17
1893...	9,498,747 08	7,636,075 81	1,058,095 75	857,264 35	180,132 25	27,171 69	30,816 89	815,200 70
1894...	8,245,845 87	6,960,950 68	1,019,568 12	878,224 53	207,724 63	22,894 36	49,073 63	879,107 85
1895...	7,006,676 58	6,897,395 04	985,945 87	892,547 04	187,788 45	24,361 92	46,697 12	755,251 48
1896...	7,358,514 15	7,767,992 63	1,020,804 74	1,329,186 36	162,118 81	22,269 68	39,386 02	792,609 63
1897...	6,205,366 80	8,147,075 10	969,539 64	1,489,755 60	150,587 43	23,191 61	33,474 05	920,096 46
1898...	6,649,428 60	9,941,624 48	1,183,890 30	1,364,159 04	176,764 64	20,606 24	46,466 82	908,046 37
1899...	7,328,191 92	11,713,858 94	1,300,876 33	1,903,223 16	181,346 14	25,559 36	52,842 44	1,061,622 69
1900...	8,074,541 07	13,491,872 86	1,428,019 46	2,189,798 17	183,147 59	28,548 59	26,842 73	1,171,550 06
1901...	7,845,406 49	13,411,749 58	1,794,555 55	1,811,974 55	191,527 27	37,138 80	45,171 84	1,350,098 08
1902...	8,424,693 04	15,155,136 39	2,163,016 40	2,741,263 29	205,803 43	42,700 86	88,174 27	1,306,967 57
1903...	9,841,627 33	17,069,881 19	2,098,633 61	3,255,121 88	212,104 39	45,912 40	87,457 75	1,527,113 35
1904...	10,338,017 31	19,554,585 54	2,113,667 94	2,172,571 04	228,532 66	41,226 25	88,831 12	1,726,681 98
1905...	11,171,010 04	20,580,301 56	2,224,967 73	1,826,789 33	216,933 42	39,295 27	123,388 07	1,570,378 88
1906...	12,944,249 35	22,187,102 94	2,520,034 97	1,852,538 47	289,363 62	44,716 82	118,725 17	1,620,711 72
*1907..	11,823,197 06	19,084,738 46	2,219,577 38	1,521,946 23	197,483 36	43,941 45	91,853 92	1,309,895 96
1908...	17,265,293 25	27,132,543 26	3,331,350 36	2,434,631 34	301,055 23	54,079 21	126,376 10	1,812,404 99
1909...	13,449,341 99	22,526,806 65	2,801,383 52	1,709,641 79	255,514 39	48,470 49	112,251 96	1,731,470 46
1910...	18,032,629 10	29,515,836 43	3,269,278 92	1,934,523 03	290,268 99	45,590 34	156,168 96	1,875,408 97
1911...	20,756,810 71	37,854,727 80	3,342,954 67	2,153,180 04	237,265 35	75,334 02	175,984 52	2,052,451 84
1912...	22,367,039 82	49,177,584 32	3,436,947 88	2,246,745 17	334,321 59	90,568 14	197,252 39	2,254,024 52
1913...	27,158,162 29	68,929,805 04	4,141,150 64	2,881,497 00	245,919 50	119,061 09	315,391 84	2,570,778 05
1914...	25,816,854 15	61,895,167 68	4,223,138 30	3,114,324 84	250,904 64	113,335 74	383,037 75	2,755,883 50
1915...	18,447,534 18	42,335,574 74	2,900,280 46	1,089,038 74	189,612 71	87,207 21	279,181 33	2,277,291 85
1916...	14,782,858 14	49,908,888 80	2,053,019 90	13,319 28	130,859 23	81,588 45	183,779 26	1,820,520 79
1917...	18,801,123 35	75,516,313 64	1,909,617 93	3,338 02	168,360 18	87,295 25	233,380 58	1,154,834 68
1918...	14,077,045 20	88,018,758 84	1,514,316 82	6,408 39	171,714 82	68,999 65	155,635 27	594,803 69
1919...	11,164,989 99	87,079,923 49	1,041,795 76	69 20	17,494 76	29,761 47	94,969 56	137,543 82
1920...	20,563,024 47	112,359,727 73	2,118,122 55	11,019 34	222,558 80	56,303 41	159,539 54	469,554 53
1921...	35,615,766 12	110,366,769 74	4,360,667 54	135,890 10	377,423 20	110,965 74	312,631 00	2,279,379 89
1922...	23,585,155 14	71,864,841 71	3,503,657 16	229,948 22	320,168 17	47,747 09	208,488 61	1,188,703 33
1923...	28,424,485 40	74,779,233 75	3,446,706 01	331,728 59	348,850 51	38,302 55	231,478 54	1,216,114 49
1924...	28,136,459 19	79,345,249 74	5,390,368 21	1,138,208 78	478,617 53	105,923 85	314,405 09	1,308,160 02
1925...	27,543,640 17	66,317,496 83	5,717,901 99	1,477,362 18	486,044 58	158,446 33	336,082 17	1,292,850 06
1926...	30,134,249 71	80,816,739 34	6,102,174 95	1,985,471 43	417,015 31	161,583 62	458,972 92	1,215,817 95
1927...	32,330,634 01	90,779,661 28	7,666,059 92	3,002,776 56	468,576 73	185,384 24	693,044 42	1,003,180 79
1928...	38,377,522 19	97,124,431 08	9,135,133 59	3,690,687 07	529,364 24	274,442 34	783,745 77	1,561,979 38
1929...	39,980,680 22	122,779,384 44	9,509,100 89	4,731,043 72	548,143 42	196,394 91	811,677 73	2,103,695 78

*9 months.

No. 5—Statement showing Duty Collected by Countries—*Continued*

Fiscal Year	Belgium	Newfoundland	West Indies	South America	China and Japan	Switzerland	Other Countries	Additional duties, post entries over-collections, War Tax	Total
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
1873	94,504 87	97,147 31	831,930 86	182,660 70	157 95	15,994 95	40,660 23	.....	13,017,730 17
1874	51,171 82	54,929 33	935,653 11	194,325 88	26,185 10	21,950 85	42,953 77	.....	14,421,882 67
1875	42,489 19	12,584 62	926,463 33	124,963 29	83,469 42	20,917 93	85,557 14	.....	15,361,382 12
1876	61,407 14	4,890 45	603,819 86	120,843 58	132,042 28	10,274 57	178,096 41	.....	12,833,114 48
1877	50,106 26	9,735 83	435,718 43	1,834 11	68,261 35	12,387 96	178,535 96	.....	12,548,451 09
1878	45,144 82	4,921 23	341,240 28	6,874 10	113,447 24	9,855 02	124,338 17	.....	12,795,693 17
1879	45,107 35	3,230 76	454,872 58	2,591 84	127,283 34	16,597 54	115,349 29	.....	12,939,540 66
1880	41,886 44	3,168 48	1,305,495 00	161,936 81	207,920 61	18,764 19	156,016 88	.....	14,138,849 22
1881	90,250 84	3,251 22	1,584,622 00	280,000 74	348,466 71	33,740 02	311,133 47	.....	18,500,785 97
1882	119,492 16	1,781 73	1,615,945 44	504,255 74	178,499 40	65,780 72	352,318 25	.....	21,708,837 43
1883	106,234 50	7,365 17	1,770,682 99	692,562 12	157,516 29	81,492 95	239,042 13	.....	23,172,308 97
1884	103,953 96	4,158 34	1,397,926 55	688,702 68	273,708 37	65,966 92	265,210 23	.....	20,164,963 37
1885	121,660 61	2,268 61	1,327,363 99	655,708 66	450,153 25	51,863 04	308,698 01	.....	19,133,558 99
1886	132,116 62	2,467 99	1,384,327 91	503,735 53	148,098 67	49,052 66	478,033 91	.....	19,448,123 70
1887	166,445 16	1,624 70	968,496 12	848,562 83	222,799 93	59,393 20	828,686 99	.....	22,469,705 83
1888	117,228 81	3,211 68	1,831,368 64	641,854 29	162,844 61	43,788 82	340,166 62	.....	22,209,641 53
1889	122,116 44	1,087 36	1,727,816 27	849,431 97	185,782 89	38,653 78	845,532 61	7,952 63	23,784,523 23
1890	150,349 40	3,386 14	1,223,589 61	559,312 13	216,956 50	79,331 47	804,400 21	7,089 94	24,014,908 07
1891	126,180 23	3,452 92	1,337,754 14	260,102 71	265,198 43	63,161 46	1,215,178 05	9,190 73	23,481,069 13
1892	104,003 88	4,191 49	272,167 34	75,439 20	273,256 10	49,388 45	201,112 48	20,723 09	20,550,581 53
1893	112,081 99	1,494 56	314,148 32	78,592 25	313,798 23	70,418 15	160,133 95	7,538 96	21,161,710 93
1894	119,020 54	1,623 12	292,464 66	73,489 61	273,712 97	73,695 14	172,318 29	10,108 32	19,379,822 32
1895	93,303 46	1,053 95	380,955 12	68,786 81	230,890 41	72,742 85	231,349 72	14,523 65	17,887,269 47
1896	192,457 64	1,197 81	478,829 02	106,494 83	265,572 02	93,877 62	521,413 34	64,312 97	20,219,037 32
1897	250,770 38	1,274 89	454,418 06	109,914 69	267,575 35	64,153 55	757,363 19	47,439 87	19,891,996 77
1898	287,411 60	1,690 86	304,971 01	9,761 63	291,747 74	91,525 82	328,978 26	350,715 08	22,157,788 49

No. 5—STATEMENT showing Duty Collected by Countries—*Concluded*

Fiscal Year	Belgium	Newfoundland	West Indies	South America	China and Japan	Switzerland	Other Countries	Additional duties, post entries, overcollections, War Tax	Total
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
1899	663,898 07	1,669 28	374,161 69	97,167 56	349,381 86	156,108 44	414,930 52	109,390 35	25,734,228 75
1900	916,374 13	2,740 46	363,563 81	120,148 16	279,351 97	143,983 86	414,866 20	53,760 91	28,889,110 13
1901	1,081,162 82	1,180 88	471,923 66	205,344 97	341,473 58	159,147 86	416,207 47	43,006 49	29,106,979 89
1902	387,008 06	7,023 17	550,252 39	199,921 52	370,966 45	199,638 08	509,973 06	72,994 33	32,425,532 31
1903	602,178 47	1,914 12	684,985 96	303,880 29	355,971 92	255,250 99	680,547 56	87,773 38	37,110,354 59
1904	444,514 69	2,780 11	1,202,659 24	731,277 80	444,747 26	376,616 39	873,447 83	114,191 98	40,954,349 14
1905	321,094 73	2,435 99	1,184,429 72	591,697 60	489,814 72	469,943 37	982,112 49	229,747 00	42,024,339 92
1906	511,584 66	1,092 68	1,531,148 25	712,435 40	486,583 62	546,901 63	1,070,251 05	233,660 83	46,671,101 18
*1907	261,262 94	1,153 91	692,072 94	809,020 77	376,798 58	415,707 02	977,657 28	163,864 53	40,290,171 70
1908	375,296 31	4,146 35	615,082 47	474,074 29	525,328 90	733,350 11	2,846,353 13	286,708 68	58,331,074 04
1909	357,745 34	2,549 89	1,642,462 43	700,185 39	416,616 80	591,501 16	1,458,936 73	254,912 94	48,059,791 93
1910	520,726 06	8,364 10	1,575,328 09	831,853 03	435,600 94	630,135 47	1,578,994 86	314,531 92	61,024,239 21
1911	539,675 14	5,819 21	1,954,632 33	882,791 71	430,014 82	644,991 93	1,829,013 33	376,728 67	73,312,367 59
1912	521,234 65	3,077 98	2,070,708 91	1,238,183 43	451,158 58	718,800 23	2,045,932 94	522,446 97	87,576,036 52
1913	574,815 34	2,781 43	2,370,130 38	1,100,637 88	708,201 11	882,861 51	2,500,478 11	562,016 72	115,063,687 93
1914	618,893 63	4,313 81	2,755,822 67	1,095,047 81	553,856 80	900,781 99	2,123,206 25	586,008 77	107,180,578 33
1915	266,119 46	3,491 70	3,187,995 15	1,806,369 45	439,642 65	845,898 52	1,933,070 02	3,117,602 10	79,205,910 27
1916	13,297 01	68,345 89	3,672,837 99	2,781,485 91	639,804 01	734,943 00	1,336,202 54	25,718,350 66	103,940,100 86
1917	1,620 10	83,810 42	4,318,005 94	2,790,671 39	1,805,022 88	904,796 62	1,387,994 63	38,456,269 32	147,631,454 93
1918	87 11	73,979 57	4,017,803 98	2,609,282 59	2,530,134 05	594,563 01	1,346,001 97	45,816,093 55	161,595,628 51
1919	206 20	72,670 06	3,158,994 50	2,654,078 58	2,715,490 23	297,041 01	3,888,685 49	45,592,623 75	158,046,333 87
1920	138,363 80	4,987 65	7,688,536 32	2,733,804 22	3,138,343 34	1,540,820 39	3,982,656 16	32,336,819 52	187,524,181 77
1921	665,462 63	17,845 02	7,429,689 48	2,060,142 22	2,978,441 12	3,248,028 90	3,373,257 27	6,335,323 15	179,667,683 12
1922	435,772 60	14,399 98	7,500,795 96	3,420,645 94	2,502,473 93	2,160,749 67	3,711,558 05	792,288 34	121,487,393 90
1923	657,228 10	24,334 56	12,390,210 71	2,567,820 97	2,269,553 67	1,938,371 35	4,377,830 58	761,120 34	133,803,370 12
1924	736,546 01	39,217 51	6,007,949 80	1,995,065 17	2,139,705 95	2,147,670 55	4,916,353 90	922,443 46	135,122,344 76
1925	677,926 36	31,177 78	4,883,665 28	1,660,651 70	2,240,044 62	1,864,152 82	4,662,853 05	872,157 78	120,222,453 70
1926	908,732 95	18,580 00	10,341,391 19	1,240,458 68	2,873,714 10	1,813,210 07	4,560,321 46	884,676 39	143,933,110 07
1927	1,336,604 59	21,730 26	8,137,953 94	1,173,159 24	3,354,345 87	2,298,132 91	5,060,868 92	1,454,253 35	158,966,367 03
1928	1,432,763 16	26,138 94	4,781,557 95	1,548,290 50	3,490,940 94	2,022,455 76	5,462,422 64	1,630,892 45	171,872,768 00
1929	1,672,840 04	47,024 73	4,596,675 70	1,504,686 55	3,354,578 52	1,762,580 90	5,278,852 40	1,602,145 51	200,479,505 46

*9 months.

No. 6—STATEMENT showing Percentage of Duty on Total Value of Goods entered for Home Consumption, Dutiable and Free; and percentage expense of collection of Customs Revenue in the Dominion of Canada, during each year from 1868 to 1929, inclusive

Year	Percentage of duty on Total Value of Goods entered for Home Consumption Dutiable and Free	Percentage Expense of Collection of Customs Revenue
	p.c.	p.c.
1868	12·25	05·09
1869	12·31	07·09
1870	13·28	05·41
1871	13·62	04·21
1872	12·11	04·04
1873	10·20	04·35
1874	11·32	04·55
1875	12·83	04·44
1876	13·44	05·61
1877	13·03	05·75
1878	14·03	05·58
1879	16·10	05·56
1880	19·70	05·04
1881	20·19	03·87
1882	19·27	03·33
1883	18·82	03·26
1884	18·64	03·96
1885	18·61	04·14
1886	19·50	04·10
1887	21·24	03·64
1888	21·57	03·81
1889	21·65	03·62
1890	21·21	03·63
1891	20·06	03·83
1892	17·56	04·39
1893	17·38	04·26
1894	17·13	04·75
1895	16·99	05·13
1896	18·28	04·43
1897	17·87	04·73
1898	16·95	04·37
1899	16·70	04·02
1900	15·98	03·71
1901	16·06	03·86
1902	15·99	03·62
1903	15·87	03·31
1904	16·28	03·31
1905	16·04	03·49
1906	16·07	03·31
*1907	15·66	03·04
1908	16·27	03·30
1909	16·11	04·15
1910	16·24	03·31
1911	15·87	02·98
1912	16·00	02·78
1913	17·03	02·74
1914	16·91	03·59
†1915	17·39	04·77
†1916	20·47	03·55
†1917	17·46	02·54
†1918	16·79	02·51
†1919	17·24	03·13
†1920	17·61	02·49
†1921	14·49	03·36
††1922	16·25	03·22
†1923	16·67	02·58
†1924	15·13	02·49
†1925	15·08	03·09
†1926	15·52	02·83
†1927	13·96	02·66
†1928	15·49	03·09
1929	15·80	03·02

*9 months. †Exclusive of coin and bullion, and including war tax. ††Percentage expense of collection, calculated on total Customs and Excise Revenue in 1922 and subsequent years.

No. 7—COMPARATIVE STATEMENT of the Values of the Imports entered for fiscal year from 1868 to 1929; showing also percentage excess of Imports entered for Home Consumption

—	Imports entered for Home Consumption				Exports			
	Merchandise		Coin and Bullion	Totals	Merchandise		Coin and Bullion	Totals
	Dutiable	Free			Produce	Non-Produce		
	$	$	$	$	$	$	$	$
1868.....	43,655,696	23,434,463	4,895,147	71,985,306	48,504,899	4,196,821	4,866,168	57,537,888
1869.....	41,069,342	22,085,599	4,247,229	67,402,170	52,400,772	3,855,801	4,218,208	60,474,781
1870.....	45,127,422	21,774,652	4,335,529	71,237,603	59,043,590	6,527,622	8,002,278	73,573,490
1871.....	60,094,362	24,120,026	2,733,094	86,947,482	57,630,024	9,853,244	6,690,350	74,173,618
1872.....	68,276,157	36,679,210	2,753,749	107,709,116	65,831,083	12,798,182	4,010,398	82,639,663
1873.....	71,198,176	53,310,953	3,005,465	127,514,594	76,538,025	9,405,910	3,845,987	89,789,922
1874.....	76,232,530	46,948,357	4,223,282	127,404,169	76,741,997	10,614,096	1,995,835	89,351,928
1875.....	78,138,511	39,270,057	2,210,089	119,618,657	69,709,823	7,137,319	1,039,837	77,886,979
1876.....	60,238,297	32,274,810	2,220,111	94,733,218	72,491,437	7,234,961	1,240,037	80,966,435
1877.....	60,916,770	33,209,624	2,174,089	96,300,483	68,030,546	7,111,108	733,739	75,875,393
1878.....	59,773,039	30,622,812	803,726	91,199,577	67,989,800	11,164,878	168,989	79,323,667
1879.....	55,426,836	23,275,683	1,639,089	80,341,608	62,431,025	8,355,644	704,586	71,491,255
1880.....	54,182,967	15,717,575	1,881,807	71,782,349	72,899,697	13,240,066	1,771,755	87,911,458
1881.....	71,620,725	18,867,604	1,123,275	91,611,604	83,944,701	13,375,117	971,005	98,290,823
1882.....	85,757,433	25,387,751	1,503,743	112,648,927	94,137,657	7,628,453	371,093	102,137,203
1883.....	91,588,339	30,273,157	1,275,523	123,137,019	87,702,431	9,751,773	631,600	98,085,804
1884.....	80,010,498	25,962,480	2,207,666	108,180,644	79,833,098	9,389,106	2,184,292	91,406,496
1885.....	73,269,618	26,486,157	2,954,244	102,710,019	79,131,735	8,079,646	2,026,980	89,238,361
1886.....	70,658,819	25,333,318	3,610,557	99,602,694	77,756,704	7,438,079	56,531	85,251,314
1887.....	78,120,679	26,986,531	532,218	105,639,428	80,960,909	8,549,333	5,569	89,515,811
1888.....	69,645,824	31,025,804	2,175,472	102,847,100	81,382,072	8,803,394	17,534	90,203,000
1889.....	74,475,139	34,623,057	575,251	109,673,447	80,722,456	6,938,455	1,978,256	89,189,167
1890.....	77,106,286	34,576,287	1,083,011	112,765,584	85,257,586	9,051,781	2,439,782	96,749,149
1891.....	74,536,036	36,997,918	1,811,170	113,345,124	88,671,738	8,798,631	946,927	98,417,296
1892.....	69,160,737	45,999,676	1,818,530	116,978,943	99,032,466	13,121,791	1,809,118	113,963,375
1893.....	69,873,571	45,297,259	6,534,200	121,705,030	105,488,798	8,941,856	4,133,698	118,564,352
1894.....	62,779,182	46,291,729	4,023,072	113,093,983	103,851,764	11,833,805	1,839,380	117,524,949
1895.....	58,557,655	42,118,236	4,576,620	105,252,511	102,828,441	6,485,043	4,325,319	113,638,803
1896.....	67,239,759	38,121,402	5,226,319	110,587,480	109,707,805	6,606,738	4,699,309	121,013,852
1897.....	66,220,765	40,397,062	4,676,194	111,294,021	123,632,540	10,825,163	3,492,550	137,950,253
1898.....	74,625,088	51,682,074	4,390,844	130,698,006	144,548,662	14,980,883	4,623,138	164,152,683
1899.....	89,433,172	59,989,244	4,629,177	154,051,593	137,360,792	17,520,088	4,016,025	158,896,905
1900.....	104,346,795	68,304,881	8,152,640	180,804,316	168,972,301	14,265,254	8,657,168	191,894,723
1901.....	105,969,756	71,961,163	3,307,069	181,237,988	177,431,386	17,077,757	1,978,489	196,487,632
1902.....	118,657,496	78,080,308	6,053,791	202,791,595	196,019,763	13,951,101	1,669,422	211,640,286
1903.....	136,796,065	88,298,744	8,695,707	233,790,516	214,401,674	10,828,087	619,963	225,849,724
1904.....	148,909,576	94,999,839	7,554,917	251,464,332	198,414,439	12,641,239	2,465,557	213,521,236
1905.....	150,928,787	101,035,427	9,961,340	261,925,554	190,854,946	10,617,115	1,844,811	203,316,872
1906.....	173,046,109	110,694,171	6,620,527	290,360,807	225,483,956	11,173,846	9,928,828	256,586,630
*1907....	152,065,529	98,160,306	7,029,047	257,254,882	180,545,306	11,541,927	13,189,964	205,277,197
1908.....	218,160,047	134,380,832	5,887,737	358,428,616	246,960,968	16,407,984	16,637,654	280,006,606
1909.....	175,014,160	113,580,036	9,611,761	298,205,957	242,603,584	17,318,782	1,589,793	261,512,159
1910.....	227,264,346	143,053,853	5,514,817	375,833,016	279,247,551	19,516,442	2,594,536	301,358,529
1911.....	282,723,812	170,000,791	9,226,715	461,951,318	274,316,553	15,683,657	7,196,155	297,196,365
1912.....	335,304,060	187,100,615	25,077,515	547,482,190	290,223,857	17,492,294	7,601,099	315,317,250
1913.....	441,606,885	229,600,349	4,309,811	675,517,045	355,754,600	21,313,755	16,163,702	393,232,057
1914.....	410,258,744	208,935,254	14,498,451	633,692,449	431,588,439	23,848,785	23,560,704	478,997,928
1915.....	279,792,195	176,163,713	131,483,396	587,439,304	409,418,836	52,023,673	29,366,368	490,808,877
1916.....	289,366,527	218,834,607	33,876,227	542,077,361	741,610,638	37,689,432	103,572,432	882,872,502
1917.....	461,733,609	384,717,269	26,986,548	873,437,426	1,151,375,768	27,835,332	196,547,048	1,375,758,148
1918.....	542,341,522	421,191,056	11,290,341	974,822,919	1,540,027,788	46,142,004	3,491,403	1,589,661,195
1919.....	526,494,658	393,217,047	.....	916,429,335	1,216,443,806	52,321,479	.....	1,268,765,285
1920.....	693,655,165	370,872,958	.....	1,064,528,123	1,239,492,098	47,166,611	.....	1,286,658,709
1921.....	847,561,406	392,597,476	7,218,775	1,240,158,882	1,189,163,701	21,264,418	34,184,673	1,210,428,119
1922.....	495,626,323	252,178,009	4,788,246	747,804,332	740,240,680	13,686,329	23,337,331	753,927,009
1923.....	537,258,782	265,320,462	26,455,231	802,579,244	931,451,443	13,844,394	27,548,866	945,295,837
1924.....	591,299,094	302,067,773	3,496,705	893,366,867	1,045,351,056	13,412,241	25,445,830	1,058,763,297
1925.....	516,014,455	280,918,082	4,142,292	796,932,537	1,069,067,353	12,294,290	4,919,973	1,081,361,643
1926.....	583,051,670	344,277,062	51,437,859	927,328,732	1,315,355,791	13,344,346	71,122,711	1,328,700,137
1927.....	659,897,013	370,995,492	46,086,458	1,030,892,505	1,252,157,506	15,415,636	45,052,210	1,267,573,142
1928.....	710,050,228	398,906,238	31,308,807	1,108,956,466	1,228,207,606	22,248,691	61,886,967	1,250,456,297
1929.....	821,075,430	444,603,661	29,560,310	1,265,679,091	1,363,709,672	25,186,403	95,232,463	1,388,896,075

*9 months.

Home Consumption and Exports into and from the Dominion of Canada in each entered for Home Consumption over Exports or of Exports over Imports in each year

Excess Value of Merchandise imported for Home Consumption over		Excess of total Exports over total Imports entered for Home Consumption including Coin and Bullion	Percentage Excess of Total Imports entered for Home Consumption over total Exports including Coin and Bullion	Percentage Excess of Total Exports over total Imports entered for Home Consumption including Coin and Bullion	Percentage, Increase or Decrease				—
					Gross Imports entered for Home Consumption compared with preceding year		Gross Exports compared with preceding year		
Merchandise Exported — Produce	Merchandise Exported — Produce and non-Produce				Increase	Decrease	Increase	Decrease	
$	$	$	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	
18,585,260	14,388,439	.....	25·04	.....	.....	.....	.....	.....	1868
10,754,169	6,898,368	.....	11·5	.....	.....	6·4	5·05	.....	1869
7,858,484	1,330,862	2,335,887	.....	3·3	5·7	.....	21·7	.....	1870
26,584,364	16,731,120	.....	17·2	.....	22·05	.....	0·8	.....	1871
39,124,284	26,326,102	.....	30·3	.....	23·9	.....	11·4	.....	1872
47,971,104	38,565,194	.....	42·01	.....	18·4	.....	8·6	.....	1873
46,438,890	35,824,794	.....	42·6	.....	.....	00·09	.....	00·5	1874
47,698,745	40,561,426	.....	53·6	.....	.....	00·6	.....	12·8	1875
20,021,670	12,786,709	.....	17·0	.....	.....	20·8	3·9	.....	1876
26,095,848	18,984,740	.....	27·05	.....	1·7	.....	.....	6·3	1877
22,406,051	11,241,173	.....	14·9	.....	.....	5·3	4·5	.....	1878
16,271,494	7,915,850	.....	12·4	.....	.....	11·9	.....	9·9	1879
.....	.....	16,129,109	.....	22·5	.....	10·7	22·9	.....	1880
6,543,628	.....	6,679,219	.....	7·3	27·6	.....	11·8	.....	1881
17,007,527	9,379,074	.....	10·3	.....	22·9	.....	3·9	.....	1882
34,159,065	24,407,292	.....	25·5	.....	9·3	.....	.....	3·9	1883
26,139,880	16,750,774	.....	18·4	.....	.....	12·1	.....	6·8	1884
20,624,040	12,544,394	.....	15·1	.....	.....	5·06	.....	2·4	1885
18,235,433	10,797,354	.....	16·8	.....	.....	3·03	.....	4·5	1886
24,146,301	15,596,968	.....	18·01	.....	6·06	.....	5·0	.....	1887
19,289,556	10,486,162	.....	14·02	.....	.....	2·6	00·7	.....	1888
28,825,740	21,887,285	.....	22·9	.....	6·6	.....	.....	1·1	1889
26,424,987	17,373,206	.....	16·6	.....	2·8	.....	8·5	.....	1890
22,862,216	14,063,585	.....	15·2	.....	00·5	.....	1·7	.....	1891
16,127,947	3,006,156	.....	2·7	.....	3·2	.....	15·8	.....	1892
9,682,032	740,176	.....	2·6	.....	4·04	.....	4·04	.....	1893
5,219,147	.....	4,430,966	.....	3·9	.....	7·08	.....	00·9	1894
.....	.....	8,386,292	.....	7·9	.....	6·9	.....	3·3	1895
.....	.....	10,426,372	.....	9·4	5·07	.....	6·5	.....	1896
.....	.....	26,656,232	.....	23·9	00·6	.....	13·9	.....	1897
.....	.....	33,454,677	.....	25·6	17·4	.....	18·9	.....	1898
11,985,667	.....	4,845,312	.....	3·2	17·9	.....	.....	3·2	1899
3,534,577	.....	11,090,407	.....	6·1	17·4	.....	20·8	.....	1900
269,306	.....	15,249,644	.....	8·4	00·2	.....	2·4	.....	1901
460,427	.....	8,848,691	.....	4·4	11·9	.....	7·7	.....	1902
10,412,045	.....	.....	3·5	.....	15·3	.....	6·7	.....	1903
15,175,580	32,534,341	.....	17·7	.....	7·6	.....	.....	5·5	1904
60,762,623	50,145,508	.....	28·8	.....	4·2	.....	.....	4·8	1905
47,798,248	36,624,402	.....	13·2	.....	10·9	.....	26·2	.....	1906
69,192,568	57,650,641	.....	25·3	.....	.....	11·4	.....	19·9	1907
104,918,987	88,511,003	.....	24·4	.....	39·3	.....	36·4	.....	1908
45,613,931	28,295,149	.....	14·0	.....	.....	16·9	.....	6·6	1909
90,567,876	71,051,434	.....	24·7	.....	26·03	.....	15·2	.....	1910
177,428,555	161,744,898	.....	55·4	.....	22·9	.....	.....	1·4	1911
231,224,452	213,732,158	.....	73·9	.....	18·5	.....	3·09	.....	1912
314,334,466	293,020,711	.....	71·7	.....	23·4	.....	24·7	.....	1913
186,868,705	163,019,920	.....	32·3	.....	.....	6·2	21·8	.....	1914
46,027,476	.....	.....	19·7	.....	.....	7·3	2·5	.....	1915
.....	.....	340,795,141	.....	62·9	.....	7·7	79·9	.....	1916
.....	.....	502,320,722	.....	57·5	61·1	.....	55·8	.....	1917
.....	.....	†623,626,046	.....	†64·8	†13·8	.....	†34·5	.....	1918
.....	.....	†352,335,950	.....	†38·4	.....	†4·8	.....	†20·01	1919
.....	.....	†222,130,586	.....	†20·8	†16·1	.....	†00·1	.....	1920
†50,995,181	†29,730,763	.....	†2·5	.....	†16·5	.....	.....	†5·9	1921
†7,563,652	.....	†6,122,677	.....	†1·22	.....	†39·7	.....	†37·7	1922
.....	.....	†142,716,593	.....	†17·8	†7·3	.....	†25·4	.....	1923
.....	.....	†165,396,430	.....	†18·5	†11·3	.....	†12·0	.....	1924
.....	.....	†284,429,106	.....	†35·6	.....	†10·8	†2·1	.....	1925
.....	.....	†401,371,405	.....	†43·3	†16·4	.....	†22·9	.....	1926
.....	.....	†236,680,637	.....	†22·9	†11·1	.....	.....	†4·8	1927
.....	.....	†141,499,831	.....	†12·7	†7·5	.....	.....	†1·3	1928
.....	.....	†123,216,986	.....	†9·1	†12·4	.....	†9·9	.....	1929

*9 months. †Merchandise only.

No. 8—STATEMENT (by Provinces) showing the Value of Exports, of Total Imports entered for Home Consumption, and the Amount of Duty Collected by the Dominion of Canada during the fiscal years ended March 31, 1927, 1928 and 1929

PROVINCE OF NOVA SCOTIA

No.	Ports	Fiscal Year ended March 31, 1927			Fiscal Year ended March 31, 1928			Fiscal Year ended March 31, 1929		
		Exports	Imports entered for Home Consumption	Duty	Exports	Imports entered for Home Consumption	Duty	Exports	Imports entered for Home Consumption	Duty
		$	$	$	$	$	$	$	$	$
1	Amherst	67,938	388,100	52,958 47	289,685	339,920	45,612 22	210,840	361,920	52,426 92
2	Annapolis	93,400	55,304	7,776 97	141,586	84,057	14,317 01	24,166	56,105	9,048 07
3	Antigonish		25,414	5,147 32		37,487	6,969 77		61,251	11,973 29
4	Arichat	94,360	6,426	471 91	144,793	7,955	915 41	147,836	7,179	673 23
5	Baddeck	601,648	4,407	998 15	816,623	9,997	1,396 88	702,312	11,154	2,063 30
6	Barrington Passage	111,245	6,650	697 07	133,758	11,754	1,179 12	103,030	18,761	1,422 51
7	Bridgewater	316,431	125,733	12,766 53	603,947	104,463	12,978 51	645,980	150,597	25,467 72
8	Canso	656,919	76,363	9,293 72	707,712	84,022	14,294 82	536,294	124,140	23,965 72
9	Digby	411,920	78,294	7,054 93	365,922	88,907	12,673 00	399,587	117,257	21,946 58
10	Glace Bay		258,188	46,331 58		273,038	56,491 15		247,116	44,111 11
11	Halifax	36,040,816	16,303,493	2,646,713 50	35,819,784	19,908,515	2,793,297 30	42,179,169	22,480,801	2,571,463 46
12	Kentville	71,951	507,871	21,337 38	91,028	287,663	17,104 72	52,268	494,505	20,434 71
13	Liverpool	409,975	65,087	4,877 82	225,780	154,001	8,685 67	238,715	343,658	55,801 85
14	Lockeport	46,230	17,815	523 43	48,900	13,337	663 91	40,389	16,348	1,354 35
15	Lunenburg	619,593	309,048	16,650 17	585,630	376,874	10,661 93	408,412	403,274	15,910 84
16	Middleton		44,315	1,592 03	6,213	16,556	1,330 77	4,494	19,885	1,887 39
17	New Glasgow		516,105	62,258 84		613,498	71,899 26		1,232,917	122,113 11
18	North Sydney	2,280,509	316,843	26,447 90	2,602,656	353,574	24,348 26	2,974,720	403,599	33,405 30
19	Parrsboro	735,558	3,590	576 96	978,060	10,808	1,731 18	1,148,792	7,611	1,509 49
20	Pictou	238,384	72,297	5,906 40	418,658	58,572	8,648 57	441,882	168,670	8,643 46
21	Port Hawkesbury	37,569	7,832	1,789 78	73,678	18,062	3,207 05	97,574	19,876	2,743 40
22	Port Hood		24,756	2,895 04	50,602	30,235	3,064 46	102,422	56,503	7,531 16
23	Shelburne	134,695	38,952	7,027 53	174,965	30,193	6,021 97	141,846	27,628	4,484 77
24	Sydney	6,031,546	1,741,527	129,021 57	4,060,054	2,078,198	176,711 30	2,866,274	2,988,736	245,235 56
25	Truro	55,711	822,064	141,721 07	55,594	920,151	137,566 52	39,266	870,771	136,475 45
26	Weymouth	436,501	21,210	1,821 39	315,389	24,308	2,764 95	332,328	40,785	3,017 67
27	Windsor	1,195,146	358,177	41,675 33	1,202,164	524,981	25,462 15	1,184,383	456,280	19,953 45
28	Yarmouth	2,538,940	1,283,601	55,337 74	2,420,068	1,285,327	54,905 85	2,656,805	1,634,419	67,903 44
	Total	53,226,985	23,479,462	3,311,671 03	52,333,249	27,746,453	3,514,903 71	57,679,784	32,821,746	3,512,967 31

PROVINCE OF PRINCE EDWARD ISLAND

1	Charlottetown	1,312,033	851,585	138,191 72	1,076,336	1,181,541	147,034 88	797,520	1,239,149	123,403 52
2	Summerside	37,034	329,368	24,486 03	189,552	553,042	39,584 70	158,592	569,564	36,129 75
	Total	1,349,067	1,180,953	162,677 75	1,265,888	1,734,583	186,619 58	956,112	1,808,713	159,533 27

PROVINCE OF NEW BRUNSWICK

1	Bathurst	197,828	263,499	15,880 78	197,918	307,402	18,073 00	87,331	448,093	42,461 54
2	Campbellton	855,536	251,729	17,281 40	1,124,562	256,864	22,681 51	583,368	398,384	45,859 85
3	Chatham	816,691	194,123	13,828 53	912,242	179,281	9,319 40	899,741	126,783	11,562 95
4	Fredericton	.....	1,200,118	322,629 51	.....	2,031,145	649,225 57	.....	2,334,454	778,097 10
5	McAdam Junction	14,960,051	302,731	33,191 78	14,074,299	281,722	23,212 43	9,124,181	336,559	25,199 67
6	Moncton	180,995	1,977,316	357,324 50	361,629	2,134,767	393,441 70	282,982	2,344,059	445,532 49
7	Newcastle	593,471	56,701	5,160 14	358,096	51,909	7,159 73	291,926	69,834	11,719 12
8	Sackville	.....	176,660	17,810 15	.....	130,267	13,035 33	.....	152,249	18,488 21
9	St. Andrews	388,177	307,175	19,802 87	338,609	292,483	20,444 05	411,836	272,864	23,335 14
10	St. John	79,149,671	21,338,672	4,805,104 23	50,466,168	17,357,214	2,639,023 50	55,861,050	15,691,713	2,175,411 41
11	St. Stephen	290,284	1,564,108	115,058 42	258,148	1,402,723	91,662 49	263,701	1,595,214	82,025 73
12	Woodstock	3,540,481	646,875	101,411 23	3,429,874	802,207	116,966 48	5,045,485	994,733	134,150 54
	Total	100,973,185	28,279,707	5,824,483 54	71,521,545	25,227,984	4,004,245 19	72,851,601	24,764,939	3,793,843 75

PROVINCE OF QUEBEC

1	Athelstan	33,307,192	4,023,007	208,846 72	33,743,853	3,680,673	210,924 59	28,389 612	3,166 908	189,867 49
2	Beebe Junction	9,603,371	1,358,489	123,654 29	7,600,961	1,440,890	140,746 37	8,230,516	1,966,950	105,535 65
3	Chicoutimi	2,819,893	5,518,692	744,946 80	6,391,557	5,766,473	325,733 44	3,433,980	3,502,384	239,767 72
4	Coaticooke	17,079,272	412,854	26,786 51	16,576,493	426,211	36,102 13	11,434,269	438,517	31,491 52
5	Drummondville	.....	.....	.....	.....	.....	.....	873	4,879,869	430,471 22
6	Gaspe	773,441	95,181	4,251 20	317,991	40,358	1,975 58	412,706	55,238	2,739 58
7	Granby	.....	1,597,899	91,584 75	.....	1,655,933	128,709 25	.....	1,496,912	149,123 59
8	Hull	.....	2,979,645	392,092 69	.....	2,573,928	291,896 89	.....	2,829,280	240,417 44
9	Lake Megantic	179,691	93,039	12,371 03	1,308,697	40,154	7,084 79	294,265	69,780	8,241 22
10	Montreal	216,947,753	212,901,307	35,536,903 97	187,612,703	227,916,633	36,999,655 78	235,665,267	245,524,953	42,773,672 26
11	Paspebiac	259,052	56,646	2,877 00	74,255	17,518	1,647 20	94,772	24,070	1,862 78
12	Perce	240,471	83,762	6,063 13	327,334	285,920	27,553 74	514,249	179,540	26,697 26
13	Port Burwell	.....	2,438	502 80	.....	14,713	2,361 88	.....	.....	.....
14	Quebec	17,877,730	15,509,185	2,350,996 95	14,814,794	19,940,309	2,933,360 43	22,043,070	17,567,179	2,780,727 96
15	Rimouski	937,259	151,796	22,631 70	908,125	124,381	15,365 60	1,111,804	290,595	46,631 91
16	Saint Armand	15,949,896	227,987	24,228 23	13,352,763	323,901	38,457 94	23,055,644	511,533	87,984 58
17	Saint Hyacinthe	784	5,409,350	562,745 02	493	7,399,242	675,788 31	.....	2,944,027	175,303 90
18	Saint John's	62,015,787	9,168,509	770,513 07	63,631,855	8,523,005	742,778 45	60,692,647	10,508,731	937,060 32
19	Shawinigan Falls	.....	5,436,889	296,426 02	.....	5,413,374	254,896 92	.....	4,782,860	265,172 46
20	Sherbrooke	615,075	8,001,055	853,262 06	474,878	9,215,252	918,923 66	530,865	10,707,835	1,055,351 80
21	Sorel	184,944	786,845	59,148 44	175,168	680,868	47,656 07	232,579	856,746	72,201 06
22	Sutton	14,773,374	397,431	40,407 23	11,712,839	267,481	48,955 78	16,443,180	364,808	56,198 28
23	Three Rivers	3,342,425	5,542,589	495,447 53	3,835,953	6,703,168	604,433 17	5,006,672	4,781,299	417,746 46
24	Valleyfield	.....	2,440,467	73,849 37	.....	2,614,879	73,469 86	.....	3,099,108	64,803 42
	Total	396,907,410	282,195,062	42,700,536 51	362,860,712	305,065,264	44,528,477 83	417,586,970	320,549,122	50,159,069 88

No. 8—Statement (by Provinces) showing the Value of Exports, of Total Imports entered for Home Consumption, etc.—*Continued*

PROVINCE OF ONTARIO

No.	Ports	Fiscal Year ended March 31, 1927			Fiscal Year ended March 31, 1928			Fiscal Year ended March 31, 1929		
		Exports	Imports entered for Home Consumption	Duty	Exports	Imports entered for Home Consumption	Duty	Exports	Imports entered for Home Consumption	Duty
		$	$	$	$	$	$	$	$	$
1	Amherstburg	2,468,710	1,421,501	238,278 38	3,280,948	1,676,087	329,830 43	2,986,215	1,715,490	320,870 80
2	Belleville	297,523	2,835,658	439,239 77	381,588	2,648,980	437,837 35	193,305	3,433,339	916,140 96
3	Bowmanville		1,115,323	79,237 89		1,353,746	120,994 48		1,062,724	108,227 88
4	Brantford	13,727	7,323,562	490,073 77	7,804	7,659,474	564,350 00	9,635	8,499,420	641,482 73
5	Bridgeburg	72,594,132	4,559,927	666,147 70	72,778,951	5,326,719	749,742 39	84,000 499	6,854,904	838,160 39
6	Brockville	263,301	1,841,103	154,085 12	621,327	2,369,706	148,458 17	763,469	4,002,393	169,582 82
7	Chatham	13,040	5,749,793	922,845 00	420,861	5,454,998	864,617 08	513,779	7,169,859	1,254,533 09
8	Cobourg	1,858,280	1,650,660	273,155 75	2,110,032	1,783,593	235,050 26	1,912,728	2,160,499	262,325 82
9	Collingwood		409,428	29,605 87		478,519	28,162 31		434,227	30,721 48
10	Cornwall	3,351,619	2,844,410	183,467 25	4,306,590	3,060,395	196,691 15	6,704,731	4,030,250	242,505 28
11	Deseronto	5,720	47,052	5,434 69	128	50,674	6,392 54	5,026	57,796	8,893 33
12	Fort Frances	15,640,522	2,144,936	438,095 11	19,347,308	2,043,440	391,494 23	18,834,953	1,826,944	314,526 21
13	Fort William	82,047,529	6,689,815	994,364 59	86,519,016	6,432,329	1,096,867 66	89,937,374	10,676,310	1,553,774 10
14	Galt		5,777,430	430,719 81	1,802	5,902,974	497,174 87	1,765	6,825,195	533,229 47
15	Gananoque	17,793	497,385	63,870 57	41,742	528,340	73,850 67	30,248	635,604	97,531 37
16	Goderich		1,389,410	93,263 34		1,328,152	113,435 43	5,254	1,517,044	138,917 84
17	Guelph		4,307,293	359,563 30		4,755,708	439,728 62		5,134,217	484,537 44
18	Hamilton	4,476,135	42,212,891	4,402,060 75	4,260,532	42,236,584	4,439,128 66	4,276,650	52,979,221	5,638,118 91
19	Ingersoll		668,021	71,095 49		750,130	77,016 26		903,463	107,684 73
20	Kenora	21,511	529,320	69,766 59	30,335	542,785	8,900 27	21,577	634,317	113,022 02
21	Kingston	216,469	2,445,349	185,560 20	244,718	2,976,565	261,866 97	304,525	2,915,263	240,503 95
22	Kitchener		13,023,139	903,596 18		13,983,286	1,177,944 70		14,949,214	1,183,113 90
23	Lindsay		452,330	43,122 05		570,448	104,345 23		672,711	123,793 59
24	London		11,585,767	1,589,759 73		12,316,421	1,721,454 98		13,402,079	1,791,383 48
25	Midland	78,858	1,618,048	104,536 00	18,906	1,300,135	119,170 39	5,096	933,183	97,584 26
26	Morrisburg	92,517	179,137	9,529 02	114,631	178,667	12,883 75	133,429	192,261	12,033 21
27	Napanee		414,317	52,734 22		375,844	50,447 26		439,294	58,540 40
28	Niagara Falls	97,985,211	8,429,512	1,113,044 36	95,254,640	10,486,808	1,533,669 34	100,057,137	13,123,150	1,764,337 39
29	North Bay	428,725	3,740,642	528,699 14	517,180	4,137,663	618,700 62	419,882	3,905,446	567,785 95
30	Orillia		2,804,576	86,012 59		4,420,480	92,709 65		3,243,094	101,667 24
31	Oshawa	1,448	24,877,254	6,188,437 96	1,557	32,146,638	8,063,136 57	435	28,491,967	6,969,833 37
32	Ottawa		13,396,531	1,902,310 30		15,117,799	2,381,701 39		17,671,808	3,019,382 05

33	Owen Sound	8,701	1,229,340	82,320 41	27,777	1,102,280	90,892 75	36,770	1,266,814	104,693 19
34	Paris	.....	1,044,343	62,145 49	.....	981,874	50,179 55	.....	1,160,604	80,125 00
35	Parry Sound	111,685	1,106,153	273,298 11	74,180	1,647,023	299,905 51	53,611	1,536,940	284,778 76
36	Peterborough	.....	7,066,561	999,902 18	833	8,165,207	1,220,696 06	1,053	9,317,442	1,339,973 43
37	Picton	.....	164,440	9,254 12	.....	149,604	9,968 73	.....	168,053	13,944 32
38	Port Arthur	105,828,148	2,760,979	406,577 26	104,106,965	2,095,466	434,135 04	127,218,858	2,777,869	317,999 58
39	Port Hope	1,045	429,552	38,738 35	601	453,444	49,552 48	105,691	472,748	47,342 67
40	Port McNicoll	10,126	88,136	1,064 56	65,799	89,381	5,153 07	37,629	68,618	2,706 11
41	Prescott	9,089,928	2,995,982	402,102 72	10,460,132	3,638,556	482,775 50	10,966,708	3,660,184	487,316 33
42	St. Catharines	970,904	5,946,940	757,573 10	504,833	5,527,165	691,640 41	293,488	6,646,914	805,185 75
43	St. Thomas	106,103	2,240,510	350,413 71	70,162	2,226,660	351,811 29	44,341	3,079,749	483,627 44
44	Sarnia	43,753,048	16,673,576	900,885 55	39,108,625	14,283,139	858,851 49	41,634,896	17,750,663	972,704 17
45	Sault Ste. Marie	13,954,128	5,446,337	767,795 71	11,090,917	6,340,452	869,137 83	8,348,659	7,543,725	906,740 11
46	Simcoe	55,823	1,384,784	119,312 36	664,416	1,334,573	122,255 16	490,564	1,705,360	135,539 35
47	Stratford	.....	2,830,141	343,583 75	.....	2,938,389	376,901 02	.....	3,146,448	398,837 17
48	Sudbury	.....	1,521,813	120,743 21	.....	1,817,053	155,973 80	.....	2,670,456	242,179 26
49	Tillsonburg	145,886	931,430	205,840 34	361,481	1,091,809	239,351 82	504,432	1,163,423	266,696 83
50	Toronto	1,921,776	228,015,957	35,687,329 15	1,522,355	242,213,317	41,729,836 29	1,532,191	266,865,149	46,925,053 18
51	Trenton	193,767	1,209,137	101,374 63	8,430	616,388	69,692 66	.....	644,584	82,049 91
52	Wallaceburg	2,362,493	1,977,425	434,812 42	1,721,317	4,437,614	516,410 42	1,732,602	3,104,047	371,999 77
53	Welland	1,042,219	10,918,112	697,186 68	2,974,892	11,506,511	640,022 59	3,020,439	15,055,597	906,476 80
54	Whitby	93,476	250,659	14,399 07	86,508	258,316	13,419 50	6,610	277,086	15,489 53
55	Windsor	52,856,367	43,878,552	9,178,247	7,656,497,150	44,433,222	9,459,687 20	63,206,373	83,390,508	18,536,364 92
56	Woodstock	17,142	1,722,866	134,607 85	13,048	2,106,400	187,291 51	8,793	3,337,033	248,283 05
	Total	514,395,535	518,815,245	75,201,220 98	519,621,017	553,847,930	85,960,295 36	570,361,420	657,319,700	103,680,852 09

PROVINCE OF MANITOBA

1	Brandon	68,079	1,306,813	151,673 39	74,584	1,684,175	189,677 34	35,547	2,489,530	249,661 00
2	Emerson	15,276,142	614,057	46,139 43	18,226,495	1,076,002	87,619 40	16,968,551	1,304,058	86,414 66
3	Gretna	89,596	120,688	8,552 53	46,829	186,426	14,090 02	19,726	138,785	10,744 83
4	Portage la Prairie	.....	544,414	63,549 94	.....	923,326	95,512 37	.....	1,518,315	175,148 03
5	Winnipeg	62,684	46,746,111	8,827,077 68	50,605	48,950,520	9,050,669 17	60,684	54,237,509	10,359,745 16
	Total	15,496,501	49,332,083	9,096,992 97	18,398,513	52,820,449	9,437,568 30	17,084,508	59,688,197	10,881,713 68

PROVINCE OF SASKATCHEWAN

1	Moose Jaw	85,494	2,267,372	347,043 77	78,662	4,122,080	448,465 08	199,275	6,072,757	656,284 29
2	North Portal	9,719,185	713,611	42,440 10	10,424,317	1,033,375	62,187 80	10,416,696	1,314,980	83,773 72
3	Prince Albert	.....	421,522	50,980 98	.....	700,136	63,477 93	.....	717,821	80,705 18
4	Regina	44,595	12,060,133	1,973,355 99	69,368	13,957,839	2,305,427 31	435,654	20,455,284	3,595,143 07
5	Saskatoon	.....	5,237,701	674,981 44	.....	6,831,933	751,937 48	.....	9,291,872	1,033,737 55
	Total	9,849,274	20,700,339	3,088,802 28	10,572,347	26,645,363	3,631,495 60	11,051,625	37,852,714	5,449,643 81

No. 8—Statement (by Provinces) showing the Value of Exports, of Total Imports entered for Home Consumption, etc.—*Concluded*

PROVINCE OF ALBERTA

No.	Ports	Fiscal Year ended March 31, 1927			Fiscal Year ended March 31, 1928			Fiscal Year ended March 31, 1929		
		Exports	Imports entered for Home Consumption	Duty	Exports	Imports entered for Home Consumption	Duty	Exports	Imports entered for Home Consumption	Duty
		$	$	$	$	$	$	$	$	$
1	Calgary	.....	9,741,058	1,916,660 65	.....	12,167,854	2,242,352 25	.....	18,991,749	3,189,875 89
2	Edmonton	.....	6,612,963	1,357,682 30	.....	8,725,528	1,647,715 32	.....	10,978,474	2,083,759 76
3	Lethbridge	1,153,353	4,900,621	220,874 53	948,037	4,389,117	264,039 35	1,211,160	5,417,043	373,017 35
4	Medicine Hat	.....	339,262	41,282 59	.....	617,649	49,910 05	.....	960,961	101,925 93
	Total	1,153,353	21,593,904	3,536,500 07	948,037	25,900,148	4,204,016 97	1,211,160	36,348,227	5,748,578 93

PROVINCE OF BRITISH COLUMBIA

1	Abbotsford	5,992,213	326,120	42,915 05	4,230,178	476,986	61,730 59	4,809 673	491,472	60,850 44
2	Cranbrook	2,350,573	552,710	78,868 34	1,743,127	520,251	68,187 74	1,028,368	631,303	82,264 39
3	Fernie	1,432,331	434,965	146,566 21	1,515,735	438,885	140,373 22	1,148,119	391,374	97,992 46
4	Grand Forks	81,364	298,838	129,540 23	64,520	245,591	95,907 48	58,023	200,702	47,269 40
5	Nanaimo	5,674,031	394,517	60,542 18	6,982,012	423,189	54,167 22	7,278,523	522,334	62,537 78
6	Nelson	577,951	460,845	79,640 80	455,685	529,050	96,483 20	335,061	528,390	98,765 02
7	New Westminster	14,512,819	2,467,611	403,216 52	12,760,754	2,151,132	364,231 54	17,706,925	2,429,060	436,562 30
8	Penticton	50,611	272,635	43,010 38	139,425	259,757	44,262 16	119,583	296,588	43,231 33
9	Prince Rupert	20,617,981	1,478,461	292,397 87	27,050,065	1,077,674	191,451 34	19,741,484	1,076,922	182,872 06
10	Revelstoke	.....	225,859	39,417 41	.....	232,385	45,721 22	.....	358,875	63,893 32
11	Rossland	10,698	680,086	78,036 96	4,848	895,698	84,563 77	6,461	732,172	84,765 63
12	Vancouver	116,920,027	69,390,839	12,606,352 74	153,021,338	74,002,310	13,050,236 20	181,222,494	77,582,326	13,545,023 18
13	Victoria	3,854,562	8,013,065	1,943,459 79	3,601,400	8,316,144	2,016,827 50	4,128,786	8,799,665	2,172,588 11
	Total	172,075,161	84,936,551	15,943,964 48	211,569,087	89,569,052	16,314,143 18	237,583,500	94,041,183	16,978,615 42

YUKON

1	Dawson	461,338	143,303	45,412 46	223,924	170,396	39,653 88	516,084	155,670	29,906 29
2	White Horse	1,685,333	199,871	45,501 71	1,283,715	192,186	42,900 94	2,013,311	289,683	75,737 45
	Total	2,146,671	343,174	90,914 17	1,507,639	362,582	82,554 82	2,529,395	445,353	105,643 74

RECAPITULATION BY PROVINCES

1	Nova Scotia	53,226,985	23,479,462	3,311,671 03	52,333,249	27,746,453	3,514,903 71	57,679,784	32,821,746	3,512,967 31
2	Prince Edward Island	1,349,067	1,180,953	162,677 75	1,265,888	1,734,583	186,619 58	956,112	1,808,713	159,533 27
3	New Brunswick	100,973,185	28,279,707	5,824,483 54	71,521,545	25,227,984	4,004,245 19	72,851,601	24,764,939	3,793,843 75
4	Quebec	396,907,410	282,195,062	42,700,536 51	362,860,712	305,065,264	44,528,477 83	417,586,970	320,549,122	50,159,069 88
5	Ontario	514,395,535	518,815,245	75,201,220 98	519,621,017	553,847,930	85,960,295 36	570,361,420	657,319,700	103,680,852 09
6	Manitoba	15,496,501	49,332,083	9,096,992 97	18,398,513	52,820,449	9,437,568 30	17,084,568	59,688,197	10,881,713 68
7	Saskatchewan	9,849,274	20,700,339	3,088,802 28	10,572,347	26,645,363	3,631,495 60	11,051,625	37,852,714	5,449,643 81
8	Alberta	1,153,353	21,593,904	3,536,500 07	948,037	25,900,148	4,204,016 97	1,211,160	36,348,227	5,748,578 93
9	British Columbia	172,075,161	84,936,551	15,943,964 48	211,569,087	89,569,052	16,314,143 18	237,583,500	94,041,183	16,978,615 42
10	Yukon	2,146,671	343,174	90,914 17	1,507,639	362,582	82,554 82	2,529,395	445,353	105,643 74
	Total	1,267,573,142	1,030,856,480	158,957,763 78	1,250,598,034	1,108,919,808	171,864,320 54	1,388,896,075	1,265,639,894	200,470,461 88
	Prepaid postal parcels duty received through P.O. Department	.....	36,025	8,603 25	.....	36,658	8,447 46	.....	39,197	9,043 58
	Grand Total	**1,267,573,142**	**1,030,892,505**	**158,966,367 03**	**1,250,598,034**	**1,108,956,466**	**171,872,768 00**	**1,388,896,075**	**1,265,679,091**	**200,479,505 46**

No. 9—Statement of Customs-Excise Revenue and other Services by Ports, Outports and Stations

NOVA SCOTIA

Ports, Outports and Preventive Stations	Import Duties	Excise Taxes	Excise Duties	Sundry Collections	Total Revenue	Import Entries	Export Entries	Excise Tax Entries	Excise Duty Entries	Railway Reports		Sea-going Vessels		Vessels trading on lakes and rivers between Canada and United States		Coasting Vessels	
										Inwards	Outwards	Arrived	Departed	Arrived	Departed	Arrived	Departed
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
Amherst	46,682 98	42,662 77	27 00	25 00	89,397 75	1,975	10	515	2	1,832	29	.....	.....	.....	.....	.....	.....
Joggin Mines	261 61	264 54	.....	.....	526 15	58	2	25	.....	22	.....	1	2	.....	.....	13	12
Springhill	5,482 33	3,495 49	.....	.....	8,977 82	207	.....	88	.....	270	4	.....	.....	.....	.....	.....	.....
Total	52,426 92	46,422 80	27 00	25 00	98,901 72	2,240	12	628	2	2,124	33	1	2	.....	.....	13	12
Annapolis Royal	2,594 92	2,759 07	.....	18 26	5,372 25	205	11	105	.....	215	14	4	4	.....	.....	116	115
Bridgetown	6,197 52	8,399 42	.....	.....	14,596 94	219	.....	96	.....	247	1	1	.....	.....	.....	37	39
Clementsport	225 90	35 63	.....	.....	261 53	61	4	.....	.....	32	.....	4	4	.....	.....	20	20
Port Wade	29 73	5 59	.....	.....	35 32	3	6	24	.....	.....	.....	2	6	.....	.....	11	7
Total	9,048 07	11,199 71	.....	18 26	20,266 04	488	21	225	.....	494	15	11	14	.....	.....	184	181
Antigonish	11,973 29	2,732 34	.....	25 00	14,730 63	284	.....	133	.....	475	18	.....	1	.....	.....	17	17
Arichat	401 68	138 95	.....	.....	540 63	84	.....	13	.....	16	.....	5	6	.....	.....	116	132
St. Peters	271 55	172 77	.....	10 00	454 32	60	19	15	.....	68	5	2	18	.....	.....	299	285
Total	673 23	311 72	.....	10 00	994 95	144	19	28	.....	84	5	7	24	.....	.....	415	417
Baddeck	1,931 70	737 70	.....	2 26	2,671 66	87	37	94	.....	85	.....	5	13	.....	.....	442	434
Iona	122 59	22 12	.....	.....	144 71	17	.....	.....	.....	58	3	.....	.....	.....	.....	259	259
New Campbellton	9 01	1 07	.....	.....	10 08	3	.....	.....	.....	.....	.....	.....	1	.....	.....	90	90
Total	2,063 30	760 89	.....	2 26	2,826 45	107	37	94	.....	143	3	5	14	.....	.....	791	783
Barrington Passage	704 98	503 81	.....	.....	1,208 79	155	2	65	.....	117	3	8	9	.....	.....	356	355
Clark's Harbor	710 58	219 71	.....	.....	930 29	108	21	51	.....	.....	.....	44	30	.....	.....	525	538
Port LaTour	6 95	1 06	.....	.....	8 01	28	.....	.....	.....	.....	.....	1	1	.....	.....	119	119
Total	1,422 51	724 58	.....	.....	2,147 09	291	23	116	.....	117	3	53	40	.....	.....	1,000	1,012
Bridgewater	25,467 72	7,474 31	.....	.....	32,942 03	733	60	200	.....	735	16	31	50	.....	.....	133	114

Canso	12,833 67	2,531 79		51 29	15,416 75	299	10	59		50		110	97			731	756
Guysboro	345 62	248 58			594 20	73	13	29		21		3	13			418	407
Isaac's Harbor	178 65	63 27			241 92	25	8	12		17		24	32			158	150
Port Mulgrave	10,266 07	940 84			11,206 91	107	2	20		236	25	1	2			1,192	1,192
Sherbrooke	341 71	507 22			848 93	48	23	34		8		6	22			78	60
Total	23,965 72	4,291 70		51 29	28,308 71	552	56	154		332	25	144	166			2,577	2,565
Digby	15,266 85	4,156 74	2 00		19,425 59	395	41	134	1	336	19	13	11			583	585
Bear River	5,571 23	952 64			6,523 87	119	12	12		95	3	9	12			107	105
Freeport	493 15	314 79			807 94	35	24	37				17	16			322	325
Sandy Cove	14 77	1 90			16 67	12	3						2			95	93
Westport	600 58	65 35			665 93	83	21					30	20			340	352
Total	21,946 58	5,491 42	2 00		27,440 00	644	101	183	1	431	22	69	61			1,447	1,460
Glace Bay	44,110 91	14,682 50		4 22	58,797 63	1,020		172		1,052	5	12	12			22	23
Halifax	2,566,939 18	469,253 47	48,343 09	6,923 23	3,091,458 97	28,790	40,313	2,060	512	12,087	12,114	1,461	1,660			1,411	1,273
Sheet Harbor	4,524 28	626 70			5,150 98	59	12			7		8	12			244	246
Total	2,571,463 46	469,880 17	48,343 09	6,923 23	3,096,609 95	28,849	40,325	2,060	512	12,094	12,114	1,469	1,672			1,655	1,519
Kentville	9,288 67	14,867 02			24,155 69	714	1	239		591	13						
Aylesford Station	454 40	798 01			1,252 41	107		37		59							
Berwick	1,032 22	865 08			1,897 30	176		71		165	3						
Canning	147 54	390 53			538 07	76		51		64	1					40	41
Port Williams	5,312 24	524 34		15 00	5,851 58	167	2	17		156	8		2			21	19
Wolfville	4,199 64	6,343 05			10,542 69	291		125		297	4	6				29	35
Total	20,434 71	23,788 03		15 00	44,237 74	1,531	3	540		1,332	29	6	2			90	95
Liverpool	55,801 85	13,802 01			69,603 86	665	16	251		668	24	121	123			79	86
Lockeport	1,354 35	315 89			1,670 24	176	6	23		117	3	18	23			33	25
Lunenburg	11,377 83	4,712 89		360 00	16,450 72	1,492	55	136		421	16	294	327			201	196
Chester	2,197 37	744 66			2,942 03	173	1	43		173	4	31	31			123	121
La Have	1,060 93	3,505 53		60 00	4,626 46	147	8	52				42	46			229	221
Mahone Bay	801 93	1,186 00			1,987 93	133		90		72	1	6	2			63	71
Riverport	472 78	22 79		60 00	555 57	162						57	37			157	194
Total	15,910 84	10,171 87		480 00	26,562 71	2,107	64	321		666	21	430	443			773	803
Middleton	1,887 39	3,118 06			5,005 45	249	1	109		200	8		1			2	1
New Glasgow	122,060 73	136,262 40		26 00	258,349 13	1,964		586		2,573	46					47	47
Merigomish	52 40	7 65			60 05	59				54	2						
Total	122,113 13	136,270 05		26 00	258,409 18	2,023		586		2,627	48					47	47

No. 9—STATEMENT of Customs-Excise Revenue and other Services, etc.—*Continued*

NOVA SCOTIA—**Concluded**

Ports, Outports and Preventive Stations	Import Duties	Excise Taxes	Excise Duties	Sundry Collections	Total Revenue	Import Entries	Export Entries	Excise Tax Entries	Excise Duty Entries	Railway Reports		Sea-going Vessels		Vessels trading on lakes and rivers between Canada and United States		Coasting Vessels	
										Inwards	Outwards	Arrived	Departed	Arrived	Departed	Arrived	Departed
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
North Sydney	15,473 85	7,467 83	.....	235 00	23,176 68	2,037	15,981	267	.....	4,928	1,758	906	902	.....	.....	859	904
Grand Narrows	899 31	9 28	.....	.....	908 59	37	.....	.....	.....	35	17	.....	.....	.....	.....	79	79
Sydney Mines	17,032 14	3,865 04	.....	.....	20,897 18	566	.....	.....	.....	676	15	.....	.....	.....	.....	.....	.....
Total	33,405 30	11,342 15	.....	235 00	44,982 45	2,640	15,981	267	.....	5,639	1,790	906	902	.....	.....	938	983
Parrsboro	1,509 49	917 80	.....	.....	2,427 29	166	140	117	.....	86	6	70	79	.....	.....	483	467
Pictou	8,643 46	10,107 92	.....	400 00	19,151 38	427	15	232	.....	457	30	20	20	.....	.....	606	593
Port Hawkesbury	1,414 94	845 66	.....	.....	2,260 60	208	10	15	.....	172	22	43	32	.....	.....	170	180
Port Hastings	1,328 46	141 59	.....	.....	1,470 05	46	.....	.....	.....	59	2	1	.....	.....	.....	127	129
Total	2,743 40	987 25	.....	.....	3,730 65	254	10	55	.....	231	24	44	32	.....	.....	297	309
Port Hood	7,531 16	2,214 66	.....	.....	9,745 82	258	27	144	.....	201	21	.....	.....	.....	.....	128	128
Shelburne	4,033 59	2,236 94	.....	19,678 75	25,949 28	252	30	94	.....	168	12	97	115	.....	.....	76	67
North East Harbour	58 21	5 19	.....	38 50	101 90	23	.....	.....	.....	.....	.....	1	2	.....	.....	88	87
Port Clyde	380 61	129 89	.....	.....	510 50	48	1	9	.....	27	7	1	1	.....	.....	96	96
Sandy Point	12 36	1 64	.....	.....	14 00	24	1	.....	.....	.....	.....	98	105	.....	.....	81	73
Total	4,484 77	2,373 66	.....	19,717 25	26,575 68	347	32	103	.....	195	19	197	223	.....	.....	341	323
Sydney	224,310 78	282,162 69	2 00	604 00	507,079 47	3,799	549	497	1	3,299	272	265	384	.....	.....	1,182	1,080
Louisburg	685 97	175 43	.....	.....	861 40	59	244	26	.....	47	87	132	137	.....	.....	154	152
New Waterford	3,261 77	868 88	.....	.....	4,130 65	336	.....	35	.....	369	11	.....	.....	.....	.....	.....	.....
Port Morien	108 37	16 93	.....	.....	125 30	22	.....	.....	.....	.....	.....	.....	.....	.....	.....	18	18
Glace Bay	16,868 87	5,603 80	.....	.....	22,472 67	384	.....	64	.....	516	4	.....	.....	.....	.....	5	7
Total	245,235 76	288,827 73	2 00	604 00	534,669 49	4,600	793	622	1	4,231	374	397	521	.....	.....	1,359	1,257

Truro	136,475 45	80,243 73		1 25	216,720 43	3,068	8	387		2,633	91						
Weymouth	1,560 22	1,861 04		13 20	3,434 46	270	64	146		207		20	31			118	107
Meteghan River	1,410 95	657 17			2,068 12	169		49				11	4			66	81
Salmon River	46 50	5 46			51 96	24						1				20	21
Total	3,017 67	2,523 67		13 20	5,554 54	463	64	195		207		32	35			204	209
Windsor	12,927 40	17,598 82		528 90	31,055 12	617	217	407		630	17	130	138			128	118
Hantsport	6,959 94	2,902 58			9,862 52	91		71		74	14					29	28
Maitland	66 11	94 80			160 91	36	1	12				2	1			17	19
Total	19,953 45	20,596 20		528 90	41,078 55	744	218	490		704	31	132	139			174	165
Yarmouth	64,575 33	23,533 52	1,425 44	239 70	89,773 99	3,403	4,974	446	114	1,152	3,417	282	282			517	530
Lower East Pubnico	65 37	9 36			74 73	31				12		41	38			99	101
Tusket	3,262 74	55 64			3,318 38	102				88	4						
Total	67,903 44	23,598 52	1,425 44	239 70	93,167 10	3,541	4,974	446	114	1,252	3,421	323	320			616	631
Nova Scotia Totals	**3,512,967 33**	**1,195,171 34**	**49,799 53**	**29,319 56**	**4,787,257 76**	**58,611**	**63,006**	**8,881**	**630**	**39,527**	**18,199**	**4,498**	**4,919**			**14,424**	**14,225**

PRINCE EDWARD ISLAND

Charlottetown	113,664 65	38,514 30	36,589 00	628 21	189,396 16	2,797	572	919	459	2,266	59	20	51			626	601
Georgetown	226 72	256 21			482 93	91	34	35		30		20	33			147	136
Montague Bridge	7,863 58	3,793 63			11,657 21	231	34	69		195	1	22	30			62	54
Murray Harbour	175 84	63 45			239 29	47		46		22		1	1			128	128
Souris	1,309 25	595 99			1,905 24	153	6	94		112		5	6			182	179
St. Peters	163 48	130 48			293 96	60		20		54							
Total	123,403 52	43,354 06	36,589 00	628 21	203,974 79	3,379	646	1,183	459	2,679	60	68	121			1,145	1,098
Summerside	33,786 20	10,879 00		522 75	45,187 95	819	16	242		932	6	11	10			79	79
Alberton	624 81	677 12		100 00	1,401 93	104		56		81	2					18	16
Port Borden	1,385 07	478 69			1,863 76	156		20		170	12					3	4
Tignish	333 67	522 28		20 00	875 95	102		125		61	2					15	17
Total	36,129 75	12,557 09		642 75	49,329 59	1,181	16	443		1,244	22	11	10			115	116
Prince Edward Island, Totals	**159,533 27**	**55,911 15**	**36,589 00**	**1,270 96**	**253,304 38**	**4,560**	**662**	**1,626**	**459**	**3,923**	**82**	**79**	**131**			**1,260**	**1,214**

NEW BRUNSWICK

Bathurst	40,682 89	25,972 01		1,371 07	68,025 97	663	5	262		924	18	5	4			16	19
Caraquet	440 80	303 01			743 81	156		30		143	8	104	105			56	56
Shippegan	1,337 85	602 81			1,940 66	114	1	31		110	1	25	29			223	220
Total	42,461 54	26,877 83		1,371 07	70,710 44	933	6	323		1,177	27	134	138			295	295

No. 9—STATEMENT of Customs-Excise Revenue and other Services, etc.—*Continued*

NEW BRUNSWICK—**Concluded**

Ports, Outports and Preventive Stations	Import Duties	Excise Taxes	Excise Duties	Sundry Collections	Total Revenue	Import Entries	Export Entries	Excise Tax Entries	Excise Duty Entries	Railway Reports		Sea-going Vessels		Vessels trading on lakes and rivers between Canada and United States		Coasting Vessels	
										Inwards	Outwards	Arrived	Departed	Arrived	Departed	Arrived	Departed
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
Campbellton	28,290 25	18,042 45	.....	.....	46,332 70	430	15	252	.....	484	8	9	15	.....	.....	81	75
Dalhousie	17,569 60	6,429 15	.....	.....	23,998 75	216	.....	119	.....	235	6	.....	.....	.....	.....	14	12
Total	45,859 85	24,471 60	.....	.....	70,331 45	646	15	371	.....	719	14	9	15	.....	.....	95	87
Chatham	10,138 57	16,251 54	.....	31 00	26,421 11	415	16	261	.....	426	2	8	14	.....	.....	108	102
Buctouche	682 18	634 55	.....	.....	1,316 73	172	3	64	.....	164	.....	1	3	.....	.....	11	10
Richibucto	742 20	1,050 29	.....	.....	1,792 49	125	8	69	.....	95	.....	1	8	.....	.....	74	71
Total	11,562 95	17,936 38	.....	31 00	29,530 33	712	27	394	.....	685	2	10	25	.....	.....	193	183
Fredericton	778,097 10	108,262 88	174,410 16	505 17	1,061,275 31	3,488	.....	619	109	3,166	101	.....	.....	.....	.....	12	12
McAdam Junction	25,199 67	2,150 79	.....	1,041 60	28,392 06	697	33,572	39	.....	15,769	25,502	.....	.....	.....	.....	.....	.....
Moncton	437,288 25	127,542 73	.....	43 00	564,873 98	5,797	759	623	.....	5,779	97	3	1	.....	.....	29	31
Albert	177 92	166 93	.....	.....	344 85	60	2	34	.....	20	3	1	2	.....	.....	14	13
Hillsboro	5,388 71	12,123 03	.....	.....	17,511 74	128	16	87	.....	101	3	15	16	.....	.....	2	2
Shediac	2,677 61	1,921 08	.....	.....	4,598 69	204	.....	115	.....	199	3	.....	.....	.....	.....	22	31
Total	445,532 49	141,753 77	.....	43 00	587,329 26	6,189	777	859	.....	6,099	106	19	19	.....	.....	67	77
Newcastle	11,719 12	17,702 79	.....	.....	29,421 91	308	13	146	.....	360	9	.....	11	.....	.....	54	42
St. Andrews	18,910 47	1,478 91	.....	56 50	20,445 88	642	372	102	.....	686	394	914	906	.....	.....	304	311
Campo Bello	1,372 98	203 52	.....	1 00	1,577 50	159	68	.....	.....	.....	.....	807	755	.....	.....	168	179
Lords Cove	1,719 91	240 67	.....	.....	1,960 58	77	321	45	.....	.....	.....	902	823	.....	.....	95	118
North Head	1,331 78	581 95	.....	625 00	2,538 73	146	281	44	.....	.....	.....	301	310	.....	.....	171	183
Total	23,335 14	2,505 05	.....	682 50	26,522 69	1,024	1,042	191	.....	686	394	2,924	2,794	.....	.....	738	791

St. John	2,158,440 75	461,371 08	33,428 13	10,063 61	2,663,303 57	21,121	22,919	2,114	626	22,105	30,407	727	609	.....	.....	1,391	1,553
St. George	2,175 53	2,871 06	.....	.....	5,046 59	147	48	96	.....	141	2	71	70	.....	.....	39	41
Sussex	14,795 13	11,104 68	.....	.....	25,899 81	395	.....	170	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total	2,175,411 41	475,346 82	33,428 13	10,063 61	2,694,249 97	21,663	22,967	2,380	626	22,246	30,409	798	679	.....	.....	1,430	1,594
St. Stephen	56,002 77	47,730 59	1,307 80	1,161 12	106,202 28	1,496	160	190	16	557	211	14	6	.....	.....	149	155
Milltown	26,022 96	4,882 26	.....	.....	30,905 22	340	581	.....	.....	417	35	.....	.....	.....	.....	.....	.....
Total	82,025 73	52,612 85	1,307 80	1,161 12	137,107 50	1,836	741	190	16	974	246	14	6	.....	.....	149	155
Sackville	14,884 17	28,482 40	.....	100 00	43,466 57	483	.....	193	.....	600	14	.....	.....	.....	.....	2	2
Port Elgin	3,604 04	1,232 78	.....	.....	4,836 82	148	.....	52	.....	133	3	2	.....	.....	.....	39	41
Total	18,488 21	29,715 18	.....	100 00	48,303 39	631	.....	245	.....	733	17	2	.....	.....	.....	41	43
Woodstock	23,923 78	11,040 72	8,565 00	3,685 23	47,214 73	1,459	1,480	380	58	993	61	.....	.....	.....	.....	.....	.....
Aroostock Junction	7,566 82	2,736 07	851 40	503 07	11,657 36	157	1,213	73	10	3,767	7,822	.....	.....	.....	.....	.....	.....
Centreville	1,502 51	509 09	.....	.....	2,011 60	205	312	30	.....	28	.....	.....	.....	.....	.....	.....	.....
Clair	2,648 96	1,123 83	.....	574 92	4,347 71	92	101	20	.....	79	21	.....	.....	.....	.....	.....	.....
Debec	524 24	122 51	.....	116 00	762 75	124	665	23	.....	882	1,901	.....	.....	.....	.....	.....	.....
Edmundston	65,081 37	17,358 05	.....	10 00	82,449 42	625	883	132	.....	960	42	.....	.....	.....	.....	.....	.....
Grand Falls	22,621 10	4,679 92	.....	20 00	27,321 02	327	118	127	.....	257	136	.....	.....	.....	.....	.....	.....
St. Leonards	10,281 76	1,645 40	.....	215 11	12,142 27	341	3,872	55	.....	149	391	.....	.....	.....	.....	.....	.....
Total	134,150 54	39,215 59	9,416 40	5,124 33	187,903 86	3,330	8,644	840	68	7,115	10,374	.....	.....	.....	.....	.....	.....
New Brunswick Totals	**3,793,843 75**	**938,551 53**	**218,562 49**	**20,123 40**	**4,971,081 17**	**41,457**	**67,804**	**6,597**	**819**	**59,729**	**67,201**	**3,910**	**3,687**	.....	.....	**3,074**	**3,279**

QUEBEC

Athelstan	113,451 95	10,307 29	.....	3,832 49	127,591 73	4,006	26,543	211	.....	12,406	33,550	.....	.....	.....	.....	.....	.....
Dundee	1,786 23	349 63	.....	110 50	2,246 36	128	291	4	.....	.....	.....	.....	.....	.....	.....	.....	.....
Hemmingford	11,610 21	1,403 00	.....	28 70	13,041 91	180	134	27	.....	57	.....	.....	.....	.....	.....	.....	.....
St. Agnes de Dundee	39,747 36	123 38	.....	.....	39,870 74	414	3,088	4	.....	4,472	8,079	.....	.....	.....	.....	.....	.....
Trout River	23,271 74	9,724 12	.....	325 10	33,320 96	250	230	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total	189,867 49	21,907 42	.....	4,296 79	216,071 70	4,978	30,286	246	.....	16,935	41,629	.....	.....	.....	.....	.....	.....
Beebe Junction	14,634 33	36,788 42	.....	1,742 49	53,165 24	1,702	12,497	291	.....	2,788	10,860	.....	.....	.....	.....	.....	.....
Georgeville	529 72	56 99	.....	104 40	691 11	19	10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Magog	31,587 39	12,822 44	.....	.....	44,409 83	390	.....	111	.....	1,122	9	.....	.....	73	73	.....	.....
Rock Island	58,784 21	29,259 65	.....	339 46	88,383 32	1,286	337	201	.....	2,699	848	.....	.....	60	60	.....	.....
Total	105,535 65	78,927 50	.....	2,186 35	186,649 50	3,397	12,844	603	.....	6,609	11,717	.....	.....	133	133	.....	.....
Chicoutimi	171,738 95	48,257 18	5,231 57	1,328 95	226,556 65	2,464	.....	763	78	3,362	48	2	.....	16	.....	98	115
Port Alfred	68,028 67	19,604 65	.....	450 00	88,083 32	641	236	115	.....	598	10	38	12	22	2	120	168
Total	239,767 62	67,861 83	5,231 57	1,778 95	314,639 97	3,105	236	878	78	3,960	58	40	12	38	2	218	283

No. 9—Statement of Customs-Excise Revenue and other Services, etc.—*Continued*

QUEBEC—**Continued**

Ports, Outports and Preventive Stations	Import Duties	Excise Taxes	Excise Duties	Sundry Collections	Total Revenue	Import Entries	Export Entries	Excise Tax Entries	Excise Duty Entries	Railway Reports		Sea-going Vessels		Vessels trading on lakes and rivers between Canada and United States		Coasting Vessels	
										Inwards	Outwards	Arrived	Departed	Arrived	Departed	Arrived	Departed
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
Coaticook	31,491 52	9,788 48	.....	2,538 34	43,818 34	1,149	14,530	276	.....	32,282	25,852	.....	.....	.....	.....	.....	.....
Drummondville	430,471 22	50,689 49	25 00	60 00	481,245 71	3,870	3	221	1	3,548	78	.....	.....	.....	.....	.....	.....
Gaspe	2,739 58	1,780 95	.....	.....	4,520 53	134	25	92	1	111	3	22	32	.....	.....	129	120
Granby	149,123 59	85,553 67	1,640,947 75	790 00	1,876,415 01	3,088	.....	915	1,458	1,884	17	.....	.....	.....	.....	.....	.....
Hull	165,451 61	622,601 41	28 00	1 20	788,082 22	2,557	.....	1,580	.....	2,616	4	.....	.....	24	22	.....	.....
Lachute	74,965 83	21,023 06	.....	.....	95,988 89	2,075	.....	393	.....	1,836	97	.....	.....	.....	.....	.....	.....
Total	240,417 44	643,624 47	28 00	1 20	884,071 11	4,632	.....	1,973	.....	4,452	101	.....	.....	24	22	.....	.....
Lake Megantic	8,241 22	5,606 50	.....	961 45	14,809 17	321	1,335	195	.....	7,674	17,803	.....	.....	.....	.....	.....	.....
Montreal	42,568,006 74	23,130,861 98	39,154,860 09	111,588 93	104,965,317 74	357,399	66,884	31,452	23,140	112,208	44,957	1,173	1,240	1,339	1,755	5,500	5,052
Berthierville	67,162 25	167,085 38	2,355 48	5,640 00	242,243 11	440	.....	322	167	444	12	.....	.....	.....	.....	.....	.....
Joliette	40,918 56	36,308 03	12,985 04	120 00	90,331 63	1,080	.....	579	616	1,667	36	.....	.....	.....	.....	.....	.....
St. Jerome	97,151 54	11,555 33	.....	.....	108,706 87	1,466	.....	190	.....	1,417	10	.....	.....	.....	.....	.....	.....
St. Roch l'Achigan	.....	113 97	358 40	.....	472 37	.....	.....	27	44	.....	.....	.....	.....	.....	.....	.....	.....
St. Lin	.....	1,337 54	40 65	.....	1,378 19	.....	.....	58	3	.....	.....	.....	.....	.....	.....	.....	.....
St. Jacques	.....	825 64	2,053 10	.....	2,878 74	.....	.....	71	109	.....	.....	.....	.....	.....	.....	.....	.....
L'Epiphanie	.....	4,566 22	46,506 61	.....	51,072 83	.....	.....	86	695	.....	.....	.....	.....	.....	.....	.....	.....
Total	42,773,239 09	23,352,654 09	39,219,159 37	117,348 93	105,462,401 48	360,385	66,884	32,785	24,774	115,736	45,015	1,173	1,240	1,339	1,755	5,500	5,052
Paspebiac	1,862 78	3,878 86	.....	47 79	5,789 43	132	7	152	.....	144	.....	2	.....	1	7	67	60
Perce	447 53	264 73	.....	.....	712 26	48	3	23	.....	35	4	.....	.....	1	3	6	4
Chandler	26,249 73	1,108 41	.....	.....	27,358 14	204	12	66	.....	206	24	24	8	.....	4	36	48
Total	26,697 26	1,373 14	.....	.....	28,070 40	252	15	89	.....	241	28	24	8	1	7	42	52

Quebec	2,631,343 86	1,342,697 13	1,487,294 28	12,306 24	5,473,641 51	31,112	4,669	4,864	1,780	17,242	11,309	449	237	184	160	1,524	1,780
Amos	20,899 81	8,366 82	.....	.....	29,266 63	494	.....	189	.....	533	8	.....	.....	.....	.....	.....	.....
Bonne Esperance	590 49	72 52	.....	.....	663 01	50	33	.....	.....	.....	.....	18	17	.....	.....	11	13
Port Menier	865 40	10 14	.....	.....	875 54	17	.....	.....	.....	.....	.....	.....	.....	.....	.....	155	155
Havre St. Pierre	12 90	20 30	.....	.....	33 20	5	.....	10	.....	.....	.....	10	10	.....	.....	51	51
Levis	27,806 24	27,063 67	14,335 71	840 00	70,045 62	1,016	.....	429	173	1,193	46	2	3	16	12	62	64
Montmagny	25,657 95	34,758 32	.....	.....	60,416 27	670	1	404	.....	817	20	.....	.....	.....	.....	37	37
Pointe-au-Pic	10,087 95	3,176 75	.....	.....	13,264 70	267	2	42	.....	336	10	.....	2	.....	.....	24	22
Riviere-du-Loup	18,988 06	16,315 02	.....	56 45	35,359 53	455	2	288	.....	592	20	.....	.....	.....	.....	133	134
Trois Pistoles	2,297 73	1,652 72	.....	.....	3,950 45	87	.....	35	.....	.....	.....	.....	.....	.....	.....	7	4
Chambord Junction	42,003 27	8,065 29	.....	.....	50,068 56	916	.....	15	.....	1,333	73	.....	.....	.....	.....	.....	.....
Total	2,780,553 66	1,442,198 68	1,501,629 99	13,202 69	5,737,585 02	35,089	4,707	6,276	1,953	22,046	11,486	479	269	200	172	2,004	2,260
Rimouski	46,631 91	24,127 43	.....	249 00	71,008 34	717	70	588	.....	971	44	8	4	.....	.....	61	60
St. Armand	73,615 34	7,278 77	.....	3,318 20	84,212 31	1,004	28,501	15	.....	3,728	24,919	.....	.....	.....	.....	.....	.....
Philipsburg	14,369 24	949 97	.....	.....	15,319 21	273	572	.....	.....	145	.....	.....	.....	.....	.....	.....	.....
Total	87,984 58	8,228 74	.....	3,318 20	99,531 52	1,277	29,073	15	.....	3,873	24,919	.....	.....	.....	.....	.....	.....
St. Hyacinthe	159,184 14	73,279 59	24,541 02	228 50	257,233 25	3,288	.....	1,089	495	3,275	39	.....	.....	.....	.....	.....	.....
St. Cesaire	.....	3,382 42	.....	.....	3,382 42	.....	.....	303	.....	.....	.....	.....	.....	.....	.....	.....	.....
Marieville	16,119 76	29,975 40	.....	.....	46,095 16	952	.....	108	.....	688	3	.....	.....	.....	.....	.....	.....
Total	175,303 90	106,637 41	24,541 02	228 50	306,710 83	4,240	.....	1,500	495	3,963	42	.....	.....	.....	.....	.....	.....
St. Johns	651,307 09	144,711 80	1,190 00	6,092 18	803,301 07	6,074	1,611	631	59	4,507	89	.....	.....	416	403	2	3
Cantic	18,898 75	1,273 21	.....	828 52	21,000 48	1,298	48,365	2	.....	15,985	52,383	.....	.....	.....	.....	.....	.....
Clarenceville	414 16	301 46	.....	2 00	717 62	44	174	32	.....	9	.....	.....	.....	.....	.....	.....	.....
Cowansville	152,047 42	26,833 27	.....	60 00	178,940 69	1,462	2	132	.....	378	7	.....	.....	.....	.....	.....	.....
Farnham	39,045 35	17,690 32	31,970 96	2 97	88,709 60	1,075	.....	232	294	1,173	27	.....	.....	.....	.....	.....	.....
Frelighsburg	872 41	342 44	.....	40 80	1,255 65	123	600	40	.....	16	.....	.....	.....	.....	.....	.....	.....
Lacolle	68,623 57	24,810 21	.....	6,157 79	99,591 57	1,959	19,462	27	.....	9,669	16,493	.....	.....	.....	.....	.....	.....
Noyan	5,851 57	744 16	.....	4 80	6,600 53	316	12,055	4	.....	771	3,720	.....	.....	.....	.....	.....	.....
Total	937,060 32	216,706 87	33,160 96	13,189 06	1,200,117 21	12,351	82,269	1,100	353	32,508	72,719	.....	.....	416	403	2	3
Shawinigan Falls	187,779 42	50,295 74	79 00	18 18	238,172 34	2,740	.....	462	4	3,617	9	.....	.....	.....	.....	.....	.....
Grand'Mere	77,393 04	25,138 29	743 50	20 00	103,294 83	1,448	.....	247	36	1,637	22	.....	.....	.....	.....	.....	.....
Total	265,172 46	75,434 03	822 50	38 18	341,467 17	4,188	.....	709	40	5,254	31	.....	.....	.....	.....	.....	.....
Sherbrooke	722,959 61	341,214 07	10,788 33	2,235 85	1,077,197 86	9,684	753	1,896	189	11,049	154	.....	.....	.....	.....	.....	.....
Armstrong	12,735 35	1,491 97	.....	1 50	14,228 82	253	267	5	.....	.....	.....	.....	.....	.....	.....	.....	.....
Comins Mills	3,514 82	1,060 82	.....	12 00	4,587 64	184	287	2	.....	3	.....	.....	.....	.....	.....	.....	.....
Richmond	92,837 18	34,788 64	.....	.....	127,625 82	1,294	.....	260	.....	1,382	23	.....	.....	.....	.....	.....	.....
St. Camille	8,856 76	1,856 92	.....	174 00	10,887 68	78	23	22	.....	864	45	.....	.....	.....	.....	.....	.....
Thetford Mines	64,818 86	20,410 76	1,607 52	38 10	86,875 24	1,256	.....	379	14	1,522	21	.....	.....	.....	.....	.....	.....
Victoriaville	96,740 72	88,725 39	390 56	88 25	185,944 92	1,299	1	724	5	1,383	8	.....	.....	.....	.....	.....	.....
Windsor Mills	52,888 50	8,008 94	.....	.....	60,897 44	554	.....	70	.....	691	7	.....	.....	.....	.....	.....	.....
Total	1,055,351 80	497,557 51	12,786 41	2,549 70	1,568,245 42	14,602	1,331	3,358	208	16,894	258	.....	.....	.....	.....	.....	.....

No. 9—STATEMENT of Customs-Excise Revenue and other Services, etc.—*Continued*

QUEBEC—Concluded

Ports, Outports and Preventive Stations	Import Duties	Excise Taxes	Excise Duties	Sundry Collections	Total Revenue	Import Entries	Export Entries	Excise Tax Entries	Excise Duty Entries	Railway Reports		Sea-going Vessels		Vessels trading on lakes and rivers between Canada and United States		Coasting Vessels	
										Inwards	Outwards	Arrived	Departed	Arrived	Departed	Arrived	Departed
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
Sorel	61,812 79	27,677 74	699 80	60 00	90,250 33	1,076	107	408	14	1,354	97	8	19	23	27	609	604
Nicolet	10,388 27	8,566 41	.....	.....	18,954 68	466	.....	183	.....	351	.....	.....	.....	.....	.....	.....	.....
Total	72,201 06	36,244 15	699 80	60 00	109,205 01	1,542	107	591	14	1,705	97	8	19	23	27	609	604
Sutton	46,262 49	9,301 61	347 00	5,348 55	61,259 65	978	16,258	212	4	4,122	42,608	.....	.....	.....	.....	.....	.....
Abercorn	3,137 52	370 59	.....	65 95	3,574 06	259	1,124	13	.....	35	.....	.....	.....	.....	.....	.....	.....
Highwater	5,482 94	1,874 70	.....	213 30	7,570 94	273	710	.....	.....	104	.....	.....	.....	.....	.....	.....	.....
Mansonville	1,315 33	744 41	.....	.....	2,059 74	126	207	71	.....	71	145	.....	.....	.....	.....	.....	.....
Total	56,198 28	12,291 31	347 00	5,627 80	74,464 39	1,636	18,299	296	4	4,332	42,753	.....	.....	.....	.....	.....	.....
Three Rivers	371,962 11	133,975 32	390 02	138 85	506,466 30	6,280	126	1,015	24	7,236	52	61	61	142	145	1,531	1,529
La Tuque	45,784 35	7,426 70	.....	.....	53,211 05	716	.....	178	173	814	9	.....	.....	.....	.....	.....	.....
St. Boniface	.....	2,134 33	18,053 40	.....	20,187 73	.....	.....	40	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total	417,746 46	143,536 35	18,443 42	138 85	579,865 08	6,996	126	1,233	197	8,050	61	61	61	142	145	1,531	1,529
Valleyfield	64,803 42	52,534 12	4,452 73	175 50	121,965 77	2,198	.....	321	22	2,171	31	.....	.....	2	2	8	8
Quebec, Totals	**50,158,462 31**	**26,939,143 00**	**42,462,275 52**	**168,787 28**	**119,728,668 11**	**470,279**	**262,147**	**54,412**	**29,597**	**295,343**	**294,742**	**1,817**	**1,645**	**2,319**	**2,675**	**10,171**	**10,031**
ONTARIO																	
Amherstburg	44,637 32	7,772 03	.....	2,314 90	54,724 25	545	22,204	96	.....	936	1	.....	.....	2,526	2,518	26	29
Essex Centre	14,560 79	7,240 38	.....	.....	21,801 17	616	.....	155	.....	726	11	.....	.....	.....	.....	.....	.....
Kingsville	15,791 66	11,908 21	773 00	267 80	28,740 67	663	678	245	205	906	23	.....	.....	120	117	217	217
Leamington	243,374 12	15,020 50	17,819 74	176 10	276,390 46	2,131	16	204	54	2,053	12	.....	.....	3	3	392	392
West Dock	2,506 91	289 53	.....	.....	2,796 44	295	343	4	.....	.....	.....	.....	.....	281	259	214	214
Total	320,870 80	42,230 65	18,592 74	2,758 80	384,452 99	4,250	23,241	704	259	4,621	47	.....	.....	2,930	2,897	849	852

Belleville	916,140 96	738,627 98	2,196,455 33	12,034 65	3,863,258 92	5,977	125	1,120	6,871	6,644	311	.....	.....	101	107	47	41
Bowmanville	108,227 88	217,318 79	.....	.....	325,546 67	1,914	.....	252	.....	1,349	10	.....	.....	.....	.....	.....	.....
Brantford	641,482 73	390,991 13	17,568 84	1,545 83	1,051,588 53	14,752	540	1,552	200	13,708	82	.....	.....	.....	.....	.....	.....
Bridgeburg	838,160 39	161,182 22	67 16	19,200 24	1,018,610 01	19,650	93,614	541	2	27,008	240,332	.....	.....	2,397	2,362	79	2
Brockville	169,582 82	66,583 37	.....	1,240 96	237,407 15	3,244	766	469	.....	2,935	31	.....	.....	713	723	223	219
Chatham	865,299 74	135,054 83	1,964 75	1,110 61	1,003,429 93	9,643	7	1,223	49	7,522	104	.....	.....	40	42	48	43
Blenheim	25,860 72	3,295 74	.....	.....	29,156 46	473	1	.....	.....	767	5	.....	.....	.....	.....	.....	.....
Erieau	243,772 72	109 78	.....	.....	243,882 50	764	2,342	.....	.....	324	69	.....	.....	259	253	24	24
Ridgetown	10,314 05	3,493 96	.....	.....	13,808 01	1,006	.....	.....	.....	1,061	14	.....	.....	.....	.....	.....	.....
Tilbury	109,285 86	1,474 47	.....	60 00	110,820 33	1,666	.....	.....	.....	1,311	12	.....	.....	.....	.....	.....	.....
Total	1,254,533 99	143,428 78	1,964 75	1,170 61	1,401,097 23	13,552	2,350	1,223	49	10,985	204	.....	.....	299	295	72	67
Cobourg	262,325 82	39,029 64	16,524 16	820 20	318,699 82	4,014	5,794	665	42	3,656	10,085	.....	.....	713	708	12	19
Collingwood	30,721 48	35,259 48	25 00	804 28	66,810 24	1,570	.....	551	.....	1,828	831	.....	.....	14	15	66	66
Cornwall	237,811 91	116,070 77	768 62	138 00	354,789 30	3,795	10,128	549	7	5,888	8,194	.....	.....	12	12	139	125
Aultsville	4,424 45	906 95	.....	.....	5,331 40	276	623	34	.....	154	.....	.....	.....	2,310	2,310	52	52
St. Regis	268 92	70 55	.....	.....	339 47	39	30	.....	.....	.....	13	.....	.....	.....	.....	.....	.....
Total	242,505 28	117,048 27	768,62	138 00	360,460 17	4,110	10,781	583	7	6,042	8,207	.....	.....	2,322	2,322	191	177
Deseronto	8,893 33	4,227 41	.....	60 00	13,180 74	450	9	55	.....	376	4	.....	.....	4	5	33	32
Fort Frances	299,024 88	45,258 68	8,452 00	2,862 94	355,598 50	4,934	22,604	174	16	9,725	35,879	.....	.....	186	182	.....	.....
Rainy River	15,501 33	1,169 47	.....	12 89	16,683 69	438	332	26	.....	6,523	5,531	.....	.....	170	200	18	17
Total	314,526 21	46,428 15	8,452 00	2,875 83	372,282 19	5,372	22,936	200	16	16,248	41,410	.....	.....	356	382	18	17
Fort William	1,553,774 10	210,638 52	10,604 93	1,077 70	1,776,095 25	7,428	708	729	69	6,540	4,026	.....	2	788	660	856	860
Galt	344,579 21	239,860 67	.....	295 06	584,734 94	6,340	204	1,652	.....	6,790	121	.....	.....	.....	.....	.....	.....
Ayr	82,394 92	3,505 84	.....	.....	85,900 76	328	.....	.....	.....	354	1	.....	.....	.....	.....	.....	.....
Preston	106,255 34	182,043 21	21,495 45	.....	309,794 00	2,728	.....	.....	35	3,289	22	.....	.....	.....	.....	.....	.....
Total	533,229 47	425,409 72	21,495 45	295 06	980,429 70	9,396	204	1,652	35	10,433	144	.....	.....	.....	.....	.....	.....
Gananoque	95,361 91	11,842 48	.....	590 79	107,795 18	1,584	250	282	.....	1,345	10	.....	.....	3,202	3,202	82	83
Rockport	2,169 46	244 59	.....	520 00	2,934 05	110	35	1	.....	.....	.....	.....	.....	1,836	1,836	53	53
Total	97,531 37	12,087 07	.....	1,110 79	110,729 23	1,694	285	283	.....	1,345	10	.....	.....	5,038	5,038	135	136

No. 9—STATEMENT of Customs-Excise Revenue and other Services, etc.—*Continued*

ONTARIO—Continued

Ports, Outports and Preventive Stations	Import Duties	Excise Taxes	Excise Duties	Sundry Collections	Total Revenue	Import Entries	Export Entries	Excise Tax Entries	Excise Duty Entries	Railway Reports		Sea-going Vessels		Vessels trading on lakes and rivers between Canada and United States		Coasting Vessels	
										Inwards	Outwards	Arrived	Departed	Arrived	Departed	Arrived	Departed
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
Goderich	33,769 46	18,479 18	2 00	860 00	53,110 64	1,492	.....	583	1	1,597	2,649	.....	.....	25	49	80	67
Clinton	18,639 30	11,596 01	.....	.....	30,235 31	569	15	241	.....	601	7	.....	.....	.....	.....	.....	.....
Kincardine	54,579 86	37,057 37	.....	60 00	91,697 23	1,015	3	192	.....	1,154	24	.....	.....	8	7	16	16
Southampton	19,997 45	27,683 28	.....	.....	47,680 73	577	.....	100	.....	832	3	.....	.....	1	1	7	7
Wingham	11,931 77	23,923 53	.....	.....	35,855 30	638	.....	346	.....	696	8	.....	.....	.....	.....	.....	.....
Total	138,917 84	118,739 37	2 00	920 00	258,579 21	4,291	18	1,462	1	4,880	2,691	.....	.....	34	57	103	90
Guelph	432,113 00	439,639 87	105,709 57	3,712 85	981,175 29	8,881	.....	1,753	425	8,856	74	.....	.....	.....	.....	.....	.....
Hanover	38,900 13	87,158 83	303 00	.....	126,361 96	1,398	.....	322	.....	1,775	12	.....	.....	.....	.....	.....	.....
Walkerton	13,524 31	19,122 28	.....	.....	32,646 59	406	.....	181	.....	637	4	.....	.....	.....	.....	.....	.....
Total	484,537 44	545,920 98	106,012 57	3,712 85	1,140,183 84	10,685	.....	2,256	425	11,268	90	.....	.....	.....	.....	.....	.....
Hamilton	5,368,492 65	3,241,152 08	4,044,992 65	4,612 29	12,659,249 67	72,057	465	7,032	1,584	48,333	712	.....	.....	216	225	400	212
Dundas	94,574 08	50,492 18	.....	.....	145,066 26	1,990	.....	.....	.....	1,979	9	.....	.....	.....	.....	.....	.....
Dunnville	32,865 26	74,648 46	.....	4 34	107,518 06	962	44	.....	.....	1,029	14	.....	.....	1	1	1	1
Grimsby	57,895 61	30,423 13	.....	.....	88,318 74	926	6	.....	.....	976	9	.....	.....	.....	.....	.....	.....
Oakville	25,460 18	21,821 03	.....	.....	47,281 21	854	.....	.....	.....	1,103	6	.....	.....	.....	.....	.....	.....
Port Maitland	58,831 13	1,170 00	.....	.....	60,001 13	121	3,139	.....	.....	81	5,733	.....	.....	191	187	53	33
Total	5,638,118 91	3,419,706 88	4,044,992 65	4,616 63	13,107,435 07	76,910	3,654	7,032	1,584	53,501	6,483	.....	.....	408	413	454	246
Ingersoll	107,684 73	30,046 37	.....	.....	137,731 10	2,615	.....	425	.....	2,450	6	.....	.....	.....	.....	.....	.....
Kenora	90,680 27	27,176 86	3,981 20	700 46	122,538 79	1,673	153	403	39	1,382	59	.....	.....	147	147	18	19
Dryden	22,341 75	17,653 68	.....	.....	39,995 43	362	.....	89	.....	319	3	.....	.....	.....	.....	.....	.....
Total	113,022 02	44,830 54	3,981 20	700 46	162,534 22	2,035	153	492	39	1,701	62	.....	.....	147	147	18	19
Kingston	240,503 95	106,719 54	18,560 84	710 32	366,494 65	5,771	1,702	946	118	5,622	148	.....	.....	1,301	1,345	556	526

Kitchener	955,624 23	556,395 83	17,097 75	997 58	1,530,115 39	12,485		1,898	156	12,310	113						
Elmira	27,654 16	18,333 56			45,987 72	856		148		1,097	7						
New Hamburg	12,268 18	13,342 72	149 00	20 00	25,779 90	548		201	3	645	5						
Waterloo	187,567 33	320,067 32	784,874 89	8,101 93	1,300,611 47	2,752		560	894	3,964	31						
Total	1,188,113 90	908,139 43	802,121 64	9,119 51	2,902,494 48	16,641		2,807	1,053	18,016	156						
Lindsay	123,793 59	50,930 95	47,957 53	1,155 00	223,837 07	2,023		687	393	2,495	15						
London	1,744,460 42	1,702,882 95	668,511 34	4,372 37	4,120,227 08	31,232		3,686	3,107	22,870	651						
Glencoe	6,296 53	2,078 09			8,374 62	353		78		359	10						
Park Hill	4,695 01	1,396 86		1 00	6,092 87	409		45		425	1						
Strathroy	35,931 52	16,617 78		10 00	52,559 30	1,223		212		1,365	9						
Total	1,791,383 48	1,722,975 68	668,511 34	4,383 37	4,187 253 87	33,217		4,021	3,107	25,019	671						
Midland	89,237 20	20,398 18		662 32	110,297 70	1,246	3	390		1,072	9,622			104	141	240	201
Penetanguishene	8,347 06	16,736 96		95 94	25,179 76	335	1	218		365	6			3	2	1	5
Total	97,584 26	37,135 14		758 26	135,477 66	1,581	4	608		1,437	9,628			107	143	241	206
Morrisburg	6,799 71	5,917 80		306 04	13,023 55	363	434	153		195	3			357	352	61	67
Iroquois	5,233 50	5,146 19			10,379 69	265	2	47		229	1			12	12	56	46
Total	12,033 21	11,063 99		306 04	23,403 24	628	436	200		424	4			369	364	117	113
Napanee	58,540 40	24,987 42		60 00	83,587 82	1,357		318		1,326	31			4	4	2	2
Niagara Falls	1,746,848 87	535,154 69	921 58	17,908 85	2,300,833 99	25,492	93,720	1,103	72	334,232	253,900						
Chippewa	17,458 92	1,348 35			18,807 27	904		15		1,158				83	14	10	82
Total	1,764,307 79	536,503 04	921 58	17,908 85	2,319,641 26	26,396	93,720	1,118	72	335,390	253,900			83	14	10	82
North Bay	153,211 88	81,148 54	25 00	70 20	234,455 62	3,849	8	600	1	3,585	144						
Cobalt	191,880 63	61,410 27		11 00	253,301 90	3,624		597		3,970	44						
Cochrane	136,246 65	33,345 77			169,592 42	1,486		247		1,540	12						
Sturgeon Falls	7,951 10	11,186 02			19,137 12	394		148		345	2						
Timmins	78,495 69	26,852 17	3,075 00	4 00	108,426 86	2,252		347	4	2,558	15						
Total	567,785 95	213,942 77	3,100 00	85 20	784,913 92	11,605	8	1,939	5	11,998	217						
Orillia	72,381 07	59,325 40	1 00	126 30	131,833 77	2,497		683	1	3,107	20						
Bracebridge	29,286 17	15,704 37			44,990 54	1,193		378		1,421	31						
Total	101,667 24	75,029 77	1 00	126 30	176,824 31	3,690		1,061	1	4,528	51						
Oshawa	6,969,833 37	2,161,480 28	27 00	1,262 55	9,132,603 20	30,344	116	572	2	17,631	90						

No. 9—STATEMENT of Customs-Excise Revenue and other Services, etc.—*Continued*

ONTARIO—Continued

Ports, Outports and Preventive Stations	Import Duties	Excise Taxes	Excise Duties	Sundry collections	Total Revenue	Import Entries	Export Entries	Excise Tax Entries	Excise Duty Entries	Railway Reports		Sea-going Vessels		Vessels trading on lakes and rivers between Canada and United States		Coasting Vessels	
										Inwards	Outwards	Arrived	Departed	Arrived	Departed	Arrived	Departed
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
Ottawa	2,755,657 26	1,217,172 38	394,486 23	12,712 32	4,380,028 19	37,680	.....	4,252	292	22,756	610	.....	.....	.....	.....	117	115
Carleton Place	26,187 44	51,257 20	.....	.....	77,444 64	907	.....	171	.....	915	4	.....	.....	.....	.....	.....	.....
Hawkesbury	35,841 31	11,030 62	.....	.....	46,871 93	746	.....	153	.....	1,218	19	.....	.....	.....	.....	.....	.....
Pembroke	61,919 47	961,449 67	.....	.....	1,023,369 14	1,483	.....	479	.....	1,620	26	.....	.....	.....	.....	.....	.....
Perth	39,136 87	60,404 09	61,875 10	1,295 94	162,712 00	1,551	.....	375	938	1,650	182	.....	.....	.....	.....	.....	.....
Renfrew	29,022 74	31,959 11	.....	60 00	61,041 85	1,072	.....	240	.....	1,035	12	.....	.....	.....	.....	.....	.....
Smiths Falls	71,616 96	10,967 74	.....	71 00	82,655 70	2,117	.....	219	.....	2,521	25	.....	.....	.....	.....	29	29
Total	3,019,382 05	2,344,240 81	456,361 33	14,139 26	5,834,123 45	45,556	.....	5,889	1,230	31,715	878	.....	.....	.....	.....	146	144
Owen Sound	101,731 01	125,204 40	1,782 45	162 28	228,880 14	2,352	4	844	197	2,854	3,185	.....	.....	37	51	341	344
Wiarton	2,962 18	7,110 14	.....	.....	10,072 32	253	.....	179	.....	240	5	.....	.....	2	2	11	13
Total	104,693 19	132,314 54	1,782 45	162 28	238,952 46	2,605	4	1,023	197	3,094	3,190	.....	.....	39	53	352	357
Paris	80,125 00	178,344 29	.....	50 00	258,519 29	1,726	.....	221	.....	1,706	9	.....	.....	.....	.....	.....	.....
Parry Sound	12,754 85	15,862 14	2 00	146 10	28,765 09	582	1	441	2	1,096	15	.....	.....	21	21	78	78
Byng Inlet	228,234 73	53 37	.....	.....	228,288 10	209	.....	.....	.....	54	2	.....	.....	73	69	3	7
Depot Harbour	201 55	22 16	.....	.....	223 71	69	44	.....	.....	5,564	7,888	.....	.....	92	96	22	87
Key Harbour	43,587 63	.....	.....	.....	43,587 63	18	.....	.....	.....	.....	.....	.....	.....	15	8	1	8
Total	284,778 76	15,937 67	2 00	146 10	300,864 53	878	45	441	2	6,714	7,905	.....	.....	201	194	104	110
Peterborough	1,339,973 43	458,809 69	3,678 94	725 00	1,803,187 06	11,771	52	1,058	28	12,441	131	.....	.....	.....	.....	.....	.....
Picton	13,944 32	15,466 13	.....	.....	29,410 45	769	.....	398	.....	805	5	.....	.....	22	21	226	227
Port Arthur	317,999 58	136,035 46	14,210 00	1,001 86	469,246 90	4,205	895	422	63	3,763	1,026	.....	.....	1,204	1,282	815	886
Port Hope	47,342 67	25,539 54	934 32	120 00	73,936 53	1,262	153	411	12	1,561	16	.....	.....	49	51	15	13

Port McNicoll	2,706 11	564 30		159 60	3,430 01	272	3	54		140	5,939			55	67	201	189
Prescott	455,725 14	98,379 10	349,557 31	3,019 09	906,680 64	3,214	10,470	374	796	6,784	9,408			821	677	392	324
Cardinal	31,591 19	33,275 21			64,866 40	351		24		595				54	52	13	14
Total	487,316 33	131,654 31	349,557 31	3,019 09	971,547 04	3,565	10,470	398	796	7,379	9,408			875	729	405	338
St. Catharines	558,538 62	393,309 91	25,583 42	179 10	977,611 05	8,371	32	1,507	188	9,594	55						
Port Dalhousie	4,925 79	310 21			5,236 00	424	385	30		346	3			69	82	498	466
Thorold	241,721 34	51,779 05			293,500 39	5,069	23	243		7,285	17			4	98	101	7
Total	805,185 75	445,399 17	25,583 42	179 10	1,276,347 44	13,864	440	1,780	188	17,225	75			73	180	599	473
St. Thomas	356,752 39	120,253 51	1,538 02	1,341 90	479,885 82	5,724		881	99	9,716	572						
Aylmer	28,712 07	6,985 73			35,697 80	932		160		933	15						
Port Stanley	98,162 98	9,157 04			107,320 02	356	162	9		510	6,407			176	178	72	20
Total	483,627 44	136,396 28	1,538 02	1,341 60	622,903 64	7,012	162	1,050	99	11,159	6,994			176	178	72	20
Sarnia	924,801 26	2,046,731 19	6,740 04	8,608 80	2,986,881 29	12,325	41,994	751	316	107,702	358,471						
Courtwright	8,610 38	234 94			8,845 32	227	715	12		64	4			174	171	56	58
Petrolia	27,092 82	5,442 14	1 00	25 00	32,560 96	800		293	1	1,544	10						
Point Edward	12,199 71	34 66			12,234 37	530	886			272	22			331	327	389	381
Total	972,704 17	2,052,442 93	6,741 04	8,633 80	3,040,521 94	13,882	43,595	1,056	317	109,582	358,507			505	498	445	439
Sault Ste. Marie	800,628 25	482,152 26	13,515 30	3,153 10	1,299,448 91	6,702	12,727	523	46	9,687	14,558						
Blind River	36,158 43	10,336 27			46,494 70	346	42	60		362	18			22	22	163	163
Bruce Mines	10,818 40	2,147 92			12,966 32	98	7	50		111	24			35	35	73	70
Cockburn Island	208 14	37 70			245 84	20	32	6						44	43	110	110
Gore Bay	1,822 37	1,043 59			2,865 96	76	9	56		8				10	9	347	342
Little Current	53,473 05	1,873 87			55,346 92	246	3	106		193	12			32	21	224	233
Michipicoten Harbour	154 49	21 51			176 00	3	20	1						28	28		
Thessalon	3,476 98	1,227 06			4,704 04	151	11	55		161	2			39	38	242	240
Total	906,740 11	498,840 18	13,515 30	3,153 10	1,422,248 69	7,642	12,851	857	46	10,522	14,614			212	196	1,159	1,158
Simcoe	127,371 81	48,534 32	25 00	2,207 35	178,138 48	2,065		499	1	2,199	16						
Port Dover	8,167 54	6,097 75		189 60	14,454 89	532	1,580	95		520	3			669	651	30	31
Total	135,539 35	54,632 07	25 00	2,396 95	192,593 37	2,597	1,580	594	1	2,719	19			669	651	30	31
Stratford	297,776 40	212,164 12	1,249 54	17 50	511,207 56	5,010		1,164	20	5,694	52						
Listowel	50,830 02	27,827 35	35 40		78,692 77	1,713		206		2,044	13						
Mitchell	9,859 01	7,036 93			16,895 94	438		164		499							
St. Marys	40,371 74	50,523 61			90,895 35	1,026		262		1,714	4						
* Total	398,837 17	297,552 01	1,284 94	17 50	697,691 62	8,187		1,796	20	9,951	69						
Sudbury	117,096 53	130,679 74	31,603 30	202 30	279,581 87	3,060		690	46	3,140	59						
Coniston	9,215 92	1,824 56			11,040 48	292		20		297	1						
Copper Cliff	113,231 90	12,498 24			125,730 14	689		10		820	1						
Espanola	2,634 91	640 67			3,275 58	285		27		238	13						
Total	242,179 26	145,643 21	31,603 30	202 30	419,628 07	4,326		747	46	4,495	74						

No. 9—Statement of Customs-Excise Revenue and other Services, etc.—*Continued*

ONTARIO—Concluded

Ports, Outports and Preventive Stations	Import Duties	Excise Taxes	Excise Duties	Sundry Collections	Total Revenue	Import Entries	Export Entries	Excise Tax Entries	Excise Duty Entries	Railway Reports		Sea-going Vessels		Vessels trading on lakes and rivers between Canada and United States		Coasting Vessels	
										Inwards	Outwards	Arrived	Departed	Arrived	Departed	Arrived	Departed
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
Tillsonburg	80,479 83	26,599 22	.....	.....	107,079 05	1,748	.....	299	.....	1,636	11	.....	.....	.....	.....	.....	.....
Port Burwell	186,217 00	342 93	.....	15 60	186,575 53	593	165	74	.....	1,398	3,431	.....	.....	16	15	15	14
Total	266,696 83	26,942 15	.....	15 60	293,654 58	2,341	165	373	.....	3,034	3,442	.....	.....	16	15	15	14
Toronto	41,623,839 04	16,944,367 38	2,787,867 41	56,715 84	61,412,789 67	352,807	5,153	34,777	8,941	153,540	8,334	.....	.....	1,008	1,060	1,078	956
Acton	32,397 13	8,549 33	.....	.....	40,946 46	1,105	.....	153	.....	1,087	3	.....	.....	.....	.....	.....	.....
Alliston	8,456 30	5,450 58	.....	.....	13,906 88	388	.....	225	.....	400	15	.....	.....	.....	.....	.....	.....
Barrie	45,143 11	19,825 13	.....	.....	64,968 24	1,538	.....	209	.....	1,661	13	.....	.....	.....	.....	.....	.....
Brampton	168,752 51	72,765 22	.....	.....	241,517 73	2,314	.....	375	.....	3,043	21	.....	.....	.....	.....	.....	.....
Georgetown	44,577 83	14,232 59	.....	.....	58,810 42	1,190	.....	265	.....	1,322	5	.....	.....	.....	.....	.....	.....
Newmarket	41,194 61	40,984 09	.....	.....	82,178 70	1,447	.....	196	.....	1,737	16	.....	.....	.....	.....	.....	.....
Orangeville	25,567 84	19,598 94	.....	.....	45,166 78	1,245	.....	251	.....	1,424	18	.....	.....	.....	.....	.....	.....
Port Credit	39,408 31	10,542 69	.....	.....	49,951 00	859	.....	241	.....	1,961	17	.....	.....	.....	.....	.....	.....
Streetsville	34,532 19	4,561 65	.....	.....	39,093 84	700	.....	51	.....	1,131	16	.....	.....	.....	.....	.....	.....
West Toronto	4,861,169 51	143,181 19	.....	317 50	5,004,668 20	32,417	129	43	.....	29,337	442	.....	.....	.....	.....	.....	.....
Total	46,925,038 38	17,284,058 79	2,787,867 41	57,033 34	67,053,997 92	396,010	5,282	36,786	8,941	196,643	8,900	.....	.....	1,008	1,060	1,078	956
Trenton	82,049 91	24,271 67	2,040 00	75 00	108,436 58	2,475	.....	205	2	2,685	26	.....	.....	6	11	43	38
Wallaceburg	371,999 77	17,275 83	3,527 32	630 55	393,433 47	1,410	13,213	201	161	1,961	37	.....	.....	56	68	168	159
Welland	469,118 22	126,452 32	13,334 62	443 85	609,349 01	6,524	8	617	103	8,932	65	.....	.....	45	94	106	45
Port Colborne	437,358 58	25,232 00	4,106 43	855 40	467,552 41	4,374	2,507	271	64	9,776	22	.....	.....	528	701	1,409	1,309
Total	906,476 80	151,684 32	17,441 05	1,299 25	1,076,901 42	10,898	2,515	888	167	18,708	87	.....	.....	573	795	1,515	1,354
Whitby	15,489 53	10,229 24	.....	170 70	25,889 47	790	14	327	.....	1,035	8	.....	.....	8	8	4	2

Windsor	4,357,976 98	2,428,399 37	111,289 36	28,199 80	6,925,865 51	45,659	69,183	2,444	445	285,878	538,587			1,235	1,240	307	281
Belle River	4,783 57	1,114 40			5,897 97	235		67		226							
Sandwich	280,395 14	37,919 65	15,437 34		333,752 13	1,611	97,231	238	87	1,576	68			8,417	8,423	47	43
Walkerville	13,893,209 23	2,873,479 34	5,686,870 49	52,283 92	22,505,842 98	83,852	45,508	1,419	7,088	18,045	2,472			3,537	3,239	219	230
Total	18,536,364 92	5,340,912 76	5,813,597 19	80,483 72	29,771,358 59	131,357	211,922	4,168	7,620	305,725	541,127			13,189	12,902	573	554
Woodstock	243,575 03	148,357 46		408 40	392,340 89	6,145	77	738		5,653	68						
Norwich	4,708 02	5,269 95	2,694 08		12,672 05	455		198	67	456	2						
Total	248,283 05	153,627 41	2,694 08	408 40	405,012 94	6,600	77	936	67	6,109	70						
Ontario, Totals	**10,368,807 69**	**42,737,458 09**	**17,522,692 75**	**266,522 69**	**164,207,481 22**	**1,009,162**	**564,602**	**98,602**	**34,353**	**1,382,275**	**1,542,533**		**2**	**37,064**	**36,960**	**12,047**	**11,234**

MANITOBA

Brandon	205,780 23	85,226 73	14,486 00	752 22	306,245 18	3,929	7	533	65	3,498	101							
Bannerman	4,018 24	590 16			4,608 40	164	132	2		283	1,946							
Cartwright	1,146 84	662 87			1,809 71	82	9	11		35	3							
Deloraine	6,581 29	2,595 95			9,177 24	209	16	53		170	7							
Killarney	2,585 44	1,517 54		25 00	4,127 98	154	18	40		80	1							
Melita	4,872 47	2,922 58			7,795 05	145	2	35		95	3							
Souris	10,103 09	4,280 46			14,383 55	339		60		336	3							
Virden	14,573 40	5,941 64			20,515 04	379		43		334	7							
Total	249,661 00	103,737 93	14,486 00	777 22	368,662 15	5,401	184	777	65	4,831	2,071							
Emerson	86,414 66	21,229 82		3,950 51	111,594 99	2,500	20,531	21		3,781	77,925							
Gretna	9,677 56	3,434 80		100 00	13,212 36	313	112	27		153	195							
Haskett	1,067 27	693 68			1,760 95	151	100	12		382	519							
Total	10,744 83	4,128 48		100 00	14,973 31	464	212	39		535	714							
Portage la Prairie	29,014 40	30,142 40	6 00	751 23	59,914 03	1,537		520	3	1,408	31							
Dauphin	27,384 55	11,039 53		10 00	38,434 08	709		214		770	16							
The Pas	118,749 08	36,816 38			155,565 46	687		160		670	4							
Total	175,148 03	77,998 31	6 00	761 23	253,913 57	2,933		894	3	2,848	51							
Winnipeg	10,341,724 70	3,576,331 13	842,501 48	12,192 37	14,772,749 68	11,295	223	6,939	4,800	75,038	1,136							
Crystal City	1,328 08	1,054 61			2,382 69	144	24	26		96								
Sprague	16,674 41	3,825 65		264 49	20,764 55	462	332	12		3,172	4,076							
Total	10,359,727 19	3,581,211 39	842,501 48	12,456 86	14,795,896 92	11,901	579	6,977	4,800	78,306	5,211							
Manitoba, Totals	**10,881,695 71**	**3,788,305 93**	**856,993 48**	**18,045 82**	**15,545,040 94**	**130,499**	**21,506**	**8,708**	**4,868**	**90,301**	**85,972**							

No. 9—Statement of Customs-Excise Revenue and other Services, etc.—*Continued*

SASKATCHEWAN

Ports, Outports and Preventive Stations	Import Duties	Excise Taxes	Excise Duties	Sundry Collections	Total Revenue	Import Entries	Export Entries	Excise Tax Entries	Excise Duty Entries	Railway Reports		Sea-going Vessels		Vessels trading on lakes and Rivers between Canada and United States		Coasting Vessels	
										Inwards	Outwards	Arrived	Departed	Arrived	Departed	Arrived	Departed
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
Moose Jaw	373,826 61	151,131 27	18,787 05	2,863 93	546,608 86	6,072	25	643	35	4,632	60	.....	.....	.....	.....	.....	.....
Bengough	507 49	70 67	.....	475 00	1,053 16	36	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Big Muddy	6,310 19	896 09	.....	140 15	7,346 43	155	1,072	2	.....	.....	.....	.....	.....	.....	.....	.....	.....
Maple Creek	9,335 24	4,659 47	.....	181 30	14,176 01	201	.....	45	.....	182	4	.....	.....	.....	.....	.....	.....
Shaunavon	33,936 91	13,826 87	.....	65 00	47,828 78	478	.....	64	.....	496	6	.....	.....	.....	.....	.....	.....
Swift Current	133,288 63	35,065 05	.....	230 67	168,584 35	1,850	.....	126	.....	1,690	20	.....	.....	.....	.....	.....	.....
West Poplar River	7,125 10	1,007 42	.....	48 00	8,180 52	132	62	2	.....	.....	.....	.....	.....	.....	.....	.....	.....
Weyburn	82,444 87	32,585 58	.....	124 20	115,154 65	1,420	.....	83	.....	1,416	29	.....	.....	.....	.....	.....	.....
Willow Creek	4,311 21	1,130 71	.....	10 00	5,451 92	134	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Climax	5,198 04	3,622 69	.....	100 56	8,921 29	208	23	34	.....	44	1	.....	.....	.....	.....	.....	.....
Total	656,284 29	243,995 82	18,787 05	4,238 81	923,305 97	10,686	1,187	999	35	8,460	120	.....	.....	.....	.....	.....	.....
North Portal	42,404 55	13,538 20	.....	1,379 53	57,322 28	1,187	13,701	13	.....	8,833	29,795	.....	.....	.....	.....	.....	.....
Estevan	33,938 54	46,279 12	19,978 67	238 47	100,434 80	964	12	254	21	954	41	.....	.....	.....	.....	.....	.....
Marienthal	7,430 63	2,397 51	.....	.....	9,828 14	360	44	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total	83,773 72	62,214 83	19,978 67	1,618 00	167,585 22	2,511	13,757	267	21	9,787	29,836	.....	.....	.....	.....	.....	.....
Prince Albert	55,007 35	122,089 94	44,563 70	210 25	221,871 24	1,425	.....	492	82	1,222	27	.....	.....	.....	.....	.....	.....
Humboldt	11,909 94	8,415 44	.....	.....	20,325 38	420	.....	75	.....	292	7	.....	.....	.....	.....	.....	.....
Melfort	13,787 89	8,116 20	.....	600 00	22,504 09	504	.....	74	.....	378	9	.....	.....	.....	.....	.....	.....
Total	80,705 18	138,621 58	44,563 70	810 25	264,700 71	2,349	.....	641	82	1,892	43	.....	.....	.....	.....	.....	.....
Regina	3,502,184 17	654,262 24	497,152 31	4,621 74	4,658,220 46	24,430	2	1,246	593	24,970	180	.....	.....	.....	.....	.....	.....
Northgate	4,677 67	2,207 36	.....	96 00	6,981 03	253	279	6	.....	92	6,505	.....	.....	.....	.....	.....	.....
Yorkton	70,655 87	27,743 09	.....	75 00	98,473 96	1,283	.....	130	.....	1,429	16	.....	.....	.....	.....	.....	.....
Melville	17,625 36	7,022 20	.....	9 60	24,657 16	379	13	123	.....	366	6	.....	.....	.....	.....	.....	.....
Total	3,595,143 07	691,234 89	497,152 31	4,802 34	4,788,332 61	26,345	294	1,505	593	26,857	6,707	.....	.....	.....	.....	.....	.....
Saskatoon	973,680 22	366,489 98	53,518 17	3,610 55	1,397,298 92	14,545	.....	995	87	11,305	183	.....	.....	.....	.....	.....	.....
North Battleford	60,057 33	32,492 75	2,580 00	.....	95,130 08	1,408	.....	316	4	1,335	16	.....	.....	.....	.....	.....	.....
Total	1,033,737 55	398,982 73	56,098 17	3,610 55	1,492,429 00	15,953	.....	1,311	91	12,640	199	.....	.....	.....	.....	.....	.....
Saskatchewan totals	**5,449,643 81**	**1,535,049 85**	**636,579 90**	**15,079 95**	**7,636,353 51**	**57,844**	**15,238**	**4,723**	**822**	**59,636**	**36,905**	.....	.....	.....	.....	.....	.....

ALBERTA

Calgary	2,980,293 22	1,167,770 73	383,022 05	3,163 53	4,534,249 53	31,247		3,114	1,371	20,411	389							
Drumheller	39,837 27	10,622 79			50,460 06	978		130		625	10							
Red Deer	45,717 28	16,380 18		11 00	62,108 46	1,104		234		1,120	21							
Banff	17,652 69	5,357 37			23,010 06	594		68		333	17							
Okotoks	106,375 43	10,941 39			117,316 82	1,712		48		1,354	7							
Total	3,189,875 89	1,211,072 46	383,022 05	317,453	4,787,144 93	35,635		3,594	1,371	23,843	444							
Edmonton	2,014,127 24	851,092 67	254,840 83	2,061 13	3,122,121 87	24,607		3,572	655	15,927	187							
Camrose	53,235 69	23,962 31		134 50	77,332 50	1,086		289		965	13							
Wainwright	11,774 00	7,165 15			18,939 15	404		69		378	10							
Lloydminster	4,622 83	5,609 90			10,232 73	143		20		208	1							
Total	2,083,759 76	887,830 03	254,840 83	2,195 63	3,228,626 25	26,240		3,950	655	17,478	211							
Lethbridge	241,641 94	290,782 56	161,414 20	957 94	694,796 64	3,863	146	633	240	2,813	46							
Blairmore	33,733 61	10,559 67		188 80	44,482 08	425		134		524	3							
Cardston	10,877 03	3,850 86			14,727 89	317		88		301	15							
Coutts	63,907 96	34,281 79		18 32	98,208 07	1,557	2,286	37		1,631	7,520							
McLeod	22,288 58	5,632 66		65 00	27,986 24	501		63		585	45							
Aden	568 23	158 05		75 00	801 28	17	13											
Total	373,017 35	345,265 59	161,414 20	1,305 06	881,002 20	6,680	2,445	955	240	5,854	7,629							
Medicine Hat	101,925 93	60,822 62	842 00	409 77	164,000 32	2,297		380	2	1,968	38							
Alberta totals	**5,748,578 93**	**2,504,990 70**	**800,119 08**	**7,084 99**	**9,060,773,70**	**70,852**	**2,445**	**8,879**	**2,268**	**49,143**	**8,322**							

BRITISH COLUMBIA

Abbotsford	60,850 44	24,638 22		8,758 50	94,247 16	1,424	4,854	267		1,630	7,357							
Cranbrook	61,458 74	50,869 20	10,853 00	324 00	123,504 94	1,256		342	95	1,396	12							
Kingsgate	18,974 05	7,851 52			26,825 57	980	3,154	9		1,283	9,575							
Rykerts	1,831 60	401 50		200 00	2,433 10	135	57											
Total	82,264 39	59,122 22	10,853 00	524 00	152,763 61	2,371	3,211	351	95	2,679	9,587							
Fernie	92,498 96	41,366 82	12,140 00	193 55	146,199 33	976	198	311	25	821	165							
Newgate	3,818 58	692 80			4,511 38	255	314	8		803	343							
Flathead	1,674 92	253 71			1,928 63	146												
Total	97,992 46	42,313 33	12,140 00	193 55	152,639 34	1,377	512	319	25	1,624	508							
Grand Forks	42,492 38	10,078 44		740 65	53,311 47	458		85										
Bridesville	1,286 71	442 53		4 80	1,734 04	80	9	6		460	529							
Carson	544 31	451 27			995 58	91	68			1,106	2,682							
Cascade City	969 16	194 89		6 00	1,170 05	96	38			1,513	1,934							
Midway	1,423 69	1,865 68		1 20	3,290 57	155	18	23		155	34							
Myncaster	553 15	203 95			757 10	57	4			277	248							
Total	47,269 40	13,236 76		752 65	61,258 81	937	137	114		3,511	5,427							

No. 9—STATEMENT of Customs-Excise Revenue and other Services, etc.—*Continued*

BRITISH COLUMBIA—Concluded

Ports, Outports and Preventive Stations	Import Duties	Excise Taxes	Excise Duties	Sundry Collections	Total Revenue	Import Entries	Export Entries	Excise Tax Entries	Excise Duty Entries	Railway Reports		Sea-going Vessels		Vessels trading on lakes and rivers between Canada and United States		Coasting Vessels	
										Inwards	Outwards	Arrived	Departed	Arrived	Departed	Arrived	Departed
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
Nanaimo	24,416 60	17,184 17	781 05	1,210 00	43,591 82	1,082	256	348	108	448	28	338	376	.....	.....	2,608	2,605
Chemainus	18,489 40	9,532 54	.....	48 00	28,069 94	194	251	36	.....	108	2	280	338	.....	.....	347	337
Cumberland	742 71	3,491 63	.....	.....	4,234 34	141	.....	72	.....	92	.....	.....	.....	.....	.....	.....	.....
Duncan's Station	7,684 02	15,133 80	.....	.....	22,817 82	395	.....	178	.....	250	.....	.....	.....	.....	.....	.....	.....
Ladysmith	2,892 86	821 28	.....	352 80	4,066 94	143	142	55	.....	98	.....	220	266	.....	.....	2,175	2,158
Port Alberni	3,559 15	20,533 60	.....	231 00	24,323 75	238	74	192	.....	186	7	99	75	.....	.....	392	398
Union Bay	1,749 03	3,533 62	.....	121 40	5,404 05	165	135	108	.....	143	10	139	139	.....	.....	835	834
Kildonan	3,004 01	439 81	.....	464 40	3,908 22	62	587	.....	.....	.....	.....	582	593	.....	.....	590	577
Total	62,537 78	70,670 45	781 05	2,427 60	136,416 88	2,420	1,445	989	108	1,325	47	1,658	1,787	.....	.....	6,947	6,909
Nelson	94,888 11	68,566 28	13,366 00	634 82	177,455 21	1,930	13	529	43	1,832	70	.....	.....	.....	.....	1,985	1,979
Waneta	3,876 91	970 42	.....	.....	4,847 33	286	945	10	.....	1,301	1,367	.....	.....	.....	.....	.....	.....
Total	98,765 02	69,536 70	13,366 00	634 82	182,302 54	2,216	958	539	43	3,133	1,437	.....	.....	.....	.....	1,985	1,979
New Westminster	403,633 88	361,210 57	395,531 80	106,301 80	1,266,678 05	5,173	1,325	1,412	1,616	3,369	253	251	242	.....	.....	2,232	2,382
White Rock	32,928 42	6,312 75	.....	1,168 80	40,409 97	1,635	15,033	41	.....	2,513	8,746	4	3	.....	.....	6	7
Total	436,562 30	367,523 32	395,531 80	107,470 60	1,307,088 02	6,808	16,358	1,453	1,616	5,882	8,999	255	245	.....	.....	2,238	2,389
Penticton	10,532 23	7,775 38	.....	255 67	18,563 28	516	1	240	.....	417	10	.....	.....	.....	.....	.....	.....
Kelowna	13,882 27	17,615 57	.....	268 80	31,766 64	456	.....	259	.....	475	8	.....	.....	.....	.....	.....	.....
Osoyoos	5,274 27	1,057 48	.....	225 97	6,557 72	296	181	.....	.....	.....	.....	.....	.....	.....	.....	16	16
Princeton	11,823 47	11,705 98	3,650 00	.....	27,179 45	342	.....	113	19	315	4	.....	.....	.....	.....	.....	.....
Similkameen	1,719 09	708 75	.....	2 40	2,430 24	187	123	.....	.....	1,228	619	.....	.....	.....	.....	.....	.....
Total	43,231 33	38,863 16	3,650 00	752 84	86,497 33	1,797	305	612	19	2,435	641	.....	.....	.....	.....	16	16
Prince Rupert	79,035 26	31,947 65	.....	1,737 23	112,720 14	1,880	107	532	.....	342	1,595	2,588	2,663	.....	.....	2,030	2,062
Anyox	29,703 66	2,264 46	.....	69 60	32,037 72	466	52	11	.....	236	97	15	62	.....	.....	507	461
Butedale	205 16	11 03	.....	132 00	348 19	16	1	4	.....	.....	.....	129	124	.....	.....	751	755
Ocean Falls	29,952 34	12,486 25	.....	158 50	42,597 09	472	281	31	.....	54	.....	64	87	.....	.....	1,002	980
Prince George	17,670 05	22,103 14	.....	3 00	39,776 19	304	.....	434	.....	308	6	.....	.....	.....	.....	.....	.....
Stickeen	2,582 35	462 69	.....	.....	3,045 04	173	102	.....	.....	465	34	.....	.....	33	34	.....	.....
Stewart	23,082 41	5,726 63	.....	955 90	29,764 94	526	166	38	.....	640	1,202	84	31	.....	.....	201	252
Silver Heights	640 83	725 84	.....	358 20	1,724 87	159	21	20	.....	3,881	566	.....	.....	.....	.....	.....	.....
Total	182,872 06	75,727 69	.....	3,414 43	262,014 18	3,996	730	1,071	.....	5,926	3,500	2,880	2,967	33	34	4,491	4,510

Revelstoke	8,379 58	20,467 43	2,642 00	51 32	31,540 33	339		386	17	238	12							
Ashcroft	3,571 68	3,675 90		200 00	7,447 58	140		58		172	34							
Golden	3,363 07	5,813 74			9,176 81	96		122		61								
Kamloops	22,428 37	10,706 71		100 00	33,235 08	765		230		694	12							
Merritt	2,522 74	2,872 05	170 00		5,564 79	114		68	4	76								
Vernon	23,627 88	13,122 22		22 00	36,772 10	550		303		541	4							
Total	63,893 32	56,658 05	2,812 00	373 32	123,736 69	2,004		1,167	21	1,782	62							
Rossland	3,549 46	3,447 40			6,996 86	181	5	89		256	6							
Patterson	4,842 42	1,338 39			6,180 81	111	11				13	313						
Trail	76,373 75	24,013 01	3,050 00	50 00	103,486 76	1,530		180	10	1,738	14							
Total	84,765 63	28,798 80	3,050 00	50 00	116,664 43	1,822	16	269	10	1,994	33	313						
Vancouver	13,464,487 08	3,075,182 35	1,140,521 25	78,669 77	17,758,860 45	140,946	25,951	9,824	3,433	23,183	27,884	2,643	2,606			15,785	15,522	
Alert Bay	174 83	444 13		352 20	971 16							66	76			1,334	1,336	
Britannia Beach	19,793 09	2,821 85		104 60	22,719 54							117	114			680	675	
Powell River	60,568 18	25,165 32		168 10	85,901 60							186	179			1,702	1,710	
Total	13,545,023 18	3,103,613 65	1,140,521 25	79,294 67	17,868,452 75	140,946	25,951	9,824	3,433	23,183	27,884	3,012	2,975			19,501	19,243	
Victoria	2,103,408 70	589,852 62	192,407 13	7,719 49	2,893,387 94	20,936	3,697	2,139	360	2,716	1,926	2,515	2,366			4,027	4,241	
Bamfield	986 86	151 51		69 60	1,207 97	65	20	9				71	75			586	584	
Quatsino	58,354 28	2,021 29		353 20	60,728 77	131	58	17				46	27			137	158	
Sidney	9,731 91	4,805 48		427 40	14,964 79	266	73	80				603	555			262	299	
Tofino	106 36	196 98		54 80	358 14	13	4	21				7	10			285	276	
Total	2,172,588 11	597,027 88	192,407 13	8,624 49	2,970,647 61	21,411	3,852	2,266	360	2,716	1,926	3,242	3,033			5,297	5,558	
British Columbia, Totals	**16,978,615 42**	**4,547,730 23**	**1,775,112 23**	**213,271 47**	**23,514,729 35**	**189,529**	**58,329**	**19,241**	**5,730**	**57,820**	**67,408**	**11,360**	**11,007**	**33**	**34**	**40,475**	**40,604**	

YUKON

Dawson	29,880 21	4,078 97	1,379 27	547 25	35,885 70	447	50	45	9	301	100			14	17	59	55	
Forty Mile	26 08	3 16			29 24	14	20			699						1	1	
Total	29,906 29	4,082 13	1,379 27	547 25	35,914 94	461	70	45	9	1,000	100			14	17	60	56	
White Horse	66,636 34	9,266 40		359 20	76,261 94	847		23		3,837	180			1	1	130	130	
Carcross	8,399 82	1,093 72			9,493 54	220				1,501	95					90	90	
White Pass	701 29	58 89			760 18	141	355			324								
Total	75,737 45	10,419 01		359 20	86,515 66	1,208	355	23		5,662	275			1	1	220	220	
Yukon, Totals	**105,643 74**	**14,501 14**	**1,379 27**	**906 45**	**122,430 60**	**1,669**	**425**	**68**	**9**	**6,662**	**375**			**15**	**18**	**280**	**276**	

No. 9—STATEMENT of Customs-Excise Revenue and other Services, etc.—*Concluded*

Ports, Outports and Preventive Stations	Import Duties	Excise Taxes	Excise Duties	Sundry Collections	Total Revenue	Import Entries	Export Entries	Excise Tax Entries	Excise Duty Entries	Railway Reports		Sea-going Vessels		Vessels trading on lakes and rivers between Canada and United States		Coasting Vessels	
										Inwards	Outwards	Arrived	Departed	Arrived	Departed	Arrived	Departed
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
Preventive Service				597,391 71	597,391 71												
British Post Office Parcels	9,043 58	1,433 94			10,477 52												
Department of National Revenue		195,201 50		3,507 18	198,708 68												
RECAPITULATION BY PROVINCES																	
Nova Scotia	3,512,967 33	1,195,171 34	49,799 53	29,319 56	4,787,257 76	58,611	63,006	8,881	630	39,527	18,199	4,498	4,919			14,424	14,225
Prince Edward Island	159,533 27	55,911 15	36,589 00	1,270 96	253,304 38	4,560	662	1,626	459	3,923	82	79	131			1,260	1,214
New Brunswick	3,793,843 75	938,551 53	218,562 49	20,123 40	4,971,081 17	41,457	67,804	6,597	819	59,729	67,201	3,910	3,687			3,074	3,279
Quebec	50,158,462 31	26,939,143 00	42,462,275 52	168,787 28	119,728,668 11	470,279	262,147	54,412	29,597	295,343	294,742	1,817	1,645	2,319	2,675	10,171	10,031
Ontario	163,680,807 69	42,737,458 09	17,522,692 75	266,522 69	164,207,481 22	1,009,162	564,602	98,602	34,353	1,382,275	1,542,533		2	37,064	36,960	12,047	11,234
Manitoba	10,881,695 71	3,788,305 93	856,993 48	18,045 82	15,545,040 94	130,499	21,506	8,708	4,868	90,301	85,972						
Saskatchewan	5,449,643 81	1,535,049 85	636,579 90	15,079 95	7,636,353 51	57,844	15,238	4,723	822	59,636	36,905						
Alberta	5,748,578 93	2,504,990 70	800,119 08	7,084 99	9,060,773 70	70,852	2,445	8,879	2,268	49,143	8,322						
British Columbia	16,978,615 42	4,547,730 23	1,775,112 23	213,271 47	23,514,729 35	189,529	58,329	19,241	5,730	57,820	67,408	11,360	11,007	33	34	40,475	40,604
Yukon	105,643 74	14,501 14	1,379 27	906 45	122,430 60	1,669	425	68	9	6,662	375			15	18	280	276
Preventive Service				597,391 71	597,391 71												
British Post Office Parcels	9,043 58	1,433 94			10,477 52												
Department of National Revenue		195,201 50		3,507 18	198,708 68												
Grand total	200,478,835 54	84,453,448 40	64,360,103 25	1,341,311 46	350,633,698 65	2,034,462	1,056,164	211,737	79,555	2,044,359	2,121,739	21,664	21,391	39,431	39,687	81,731	80,863

No. 10—STATEMENT showing the Total Value of Imports entered for Home Consumption and Exports of the Dominion of Canada, from and to each Country, during the twelve months ended March 31, 1929.

Countries	Imports entered for Home Consumption			Exports		
	Dutiable Goods	Free Goods	Total Dutiable and Free	Goods the Produce of Canada	Goods not the Produce of Canada	Total Exports
BRITISH EMPIRE	$	$	$	$	$	$
United Kingdom	154,457,231	39,584,150	194,041,381	429,730,485	1,930,456	431,660,941
Aden	21,939	.....	21,939	40,906	.....	40,906
Australia	1,600,500	1,884,336	3,484,836	19,470,305	9,718	19,480,023
Barbados	3,660,520	1,538,677	5,199,197	1,681,950	29,489	1,711,439
Bermuda	17,251	44,520	61,771	1,628,003	45,389	1,673,392
British East Africa	236,621	61,062	297,683	1,568,171	.....	1,568,171
" South Africa	46,588	233,679	280,267	12,231,773	13,463	12,245,236
" West Africa, other	95,234	839	96,073	1,756	.....	1,756
" Guiana	4,828,222	45,015	4,873,237	2,238,506	50,210	2,288,716
" Honduras	1,362	259,157	260,519	900,034	24,684	924,718
" India	4,051,493	6,315,055	10,366,548	11,858,436	4,039	11,862,475
" East Indies, other	128	1,611	1,739	8,526	407	8,933
" West Indies, other	1,453,497	624,342	2,077,839	4,656,219	41,030	4,697,249
" Oceania, other	.....	.....	.....	78,051	379	78,430
" Straits Settlements	595,918	1,419,289	2,015,207	1,203,909	3,003	1,206,912
" Sudan	.....	12,180	12,180	160,704	.....	160,704
Ceylon	2,318,891	210,249	2,529,140	661,793	.....	661,793
Falkland Islands	.....	.....	.....	283	.....	283
Fiji Islands	5,696,508	1,404	5,697,912	329,797	1,400	331,197
Gambia	.....	.....	.....	30,482	.....	30,482
Gibraltar	160	.....	160	75,391	.....	75,391
Gold Coast	176,289	951,332	1,127,621	595,655	.....	595,655
Hong Kong	1,074,959	327,543	1,402,502	2,837,463	21,616	2,859,079
Iraq	31,029	100	31,129	137,729	.....	137,729
Irish Free State	32,128	26,747	58,875	4,144,743	1,613	4,146,356
Jamaica	3,015,225	1,775,070	4,790,295	5,266,083	55,689	5,321,772
Malta	290	2,333	2,623	1,110,143	8	1,110,151
Newfoundland	177,424	2,335,982	2,513,406	11,160,510	401,945	11,562,455
New Zealand	8,984,319	3,786,875	12,771,194	17,357,763	10,540	17,368,303
Nigeria	205	195	400	541,284	4,450	545,734
Palestine	23,454	1,709	25,163	189,952	.....	189,952
Sierra Leone	.....	2,445	2,445	76,641	.....	76,641
Trinidad and Tobago	2,709,004	667,054	3,376,058	4,153,571	53,815	4,207,386
Total British Empire	**195,306,389**	**62,112,950**	**257,419,339**	**536,127,017**	**2,703,343**	**538,830,360**
OTHER COUNTRIES						
Abyssinia	32,245	50	32,295	7,024	.....	7,024
Alaska	91,108	53,902	145,010	411,836	24,854	436,690
Albania	.....	1,500	1,500	.....	.....	.....
Argentina	1,911,612	5,515,956	7,427,568	14,493,191	607	14,493,798
Austria	652,687	25,506	678,193	349,701	1,644	351,345
Azores and Madeira	84,793	11	84,804	187,199	.....	187,199
Belgian Kongo	.....	.....	.....	189,180	.....	189,180
Belgium	8,909,602	3,104,936	12,014,538	27,301,384	149,680	27,451,064
Bolivia	.....	.....	.....	87,604	747	88,351
Brazil	1,724,551	1,763	1,726,314	5,872,940	6,885	5,879,825
Bulgaria	.....	.....	.....	44,672	.....	44,672
Canary Islands	7,060	.....	7,060	71,374	.....	71,374
Chile	.....	379,453	379,453	2,403,442	.....	2,403,442
China	2,370,059	725,237	3,095,296	24,242,507	3,785	24,246,292
Colombia	922,915	5,926,493	6,849,408	1,797,393	4,487	1,801,880
Costa Rica	74,437	625	75,062	184,773	2,415	187,188
Cuba	3,979,170	924,336	4,903,506	4,442,953	76,778	4,519,731
Czecho-Slovakia	3,259,265	38,328	3,297,593	1,703,825	3,798	1,707,623
Denmark	100,043	52,678	152,721	5,981,035	2,862	5,983,897
Dutch Guiana	.....	52,592	52,592	123,580	.....	123,580
" East Indies	447,782	256,881	704,663	3,605,367	330	3,605,697
" West Indies	77,962	95,357	173,319	185,044	902	185,946
Ecuador	.....	.....	.....	139,874	324	140,198
Egypt	161,942	31,631	193,573	2,845,973	24	2,845,997
Esthonia	168	.....	168	88,680	.....	88,680
Finland	41,879	56,407	98,286	2,122,129	540	2,122,669

No. 10—STATEMENT showing the Total Value of Imports entered for Home Consumption and Exports of the Dominion of Canada, from and to each Country, etc.—*Concluded*

Countries	Imports entered for Home Consumption			Exports		
	Dutiable Goods	Free Goods	Total Dutiable and Free	Goods the Produce of Canada	Goods not the Produce of Canada	Total Exports
OTHER COUNTRIES—Con.	$	$	$	$	$	$
France	24,614,371	1,601,325	26,215,696	16,131,188	112,559	16,243,747
French Africa	53,075	100,169	153,244	475,026	.....	475,026
" Guiana	.....	.....	.....	53,017	.....	53,017
" East Indies	722	377	1,099	52,055	416	52,471
" West Indies	1,719	.....	1,719	511,374	56	511,430
" Oceania	.....	.....	.....	40,042	.....	40,042
Germany	15,806,631	4,991,052	20,797,683	46,708,804	170,291	46,879,095
Greece	348,694	22,014	370,708	11,850,771	.....	11,850,771
Greenland	.....	214,276	214,276	.....	.....	.....
Guam, Tuluita and Wake Islands	.....	.....	.....	58	.....	58
Guatemala	20,372	612	20,984	191,930	81	192,011
Hawaii	316,297	633	316,930	37,262	8,375	45,637
Hayti	251,497	.....	251,497	394,791	.....	394,791
Honduras	.....	.....	.....	235,957	425	236,382
Hungary	17,629	372	18,001	134,026	.....	134,026
Iceland	373	.....	373	36,990	.....	36,990
Italy	3,401,117	859,208	4,260,325	23,024,899	3,933	23,028,832
Italian Africa	.....	.....	.....	12,974	.....	12,974
Japan	9,951,163	2,970,154	12,921,317	42,099,968	6,985	42,106,953
Jugo Slavia	21,422	4,121	25,543	48,829	.....	48,829
Korea	2,359	.....	2,359	160,995	.....	160,995
Lettonia	4,954	17,148	22,102	34,315	.....	34,315
Liberia	.....	151	151	41,898	.....	41,898
Lithuania	174	10,127	10,301	7,239	.....	7,239
Madagascar	1,865	.....	1,865	36,425	.....	36,425
Mexico	732,436	437,809	1,170,245	2,675,985	1,256	2,677,241
Miquelon and St. Pierre	8,909	46,615	55,524	2,729,124	23,360	2,752,484
Morocco	22,246	6,420	28,666	383,699	.....	383,699
Netherlands	5,741,922	3,274,841	9,016,763	44,366,888	98,976	44,465,864
Nicaragua	3,337	.....	3,337	66,562	.....	66,562
Norway	909,776	79,728	989,504	7,435,537	1,591	7,437,128
Panama	.....	.....	.....	1,040,519	1,322	1,041,841
Paraguay	.....	5,589	5,589	96,194	.....	96,194
Persia	212,811	136,012	348,823	83,577	.....	83,577
Peru	716,786	3,731,072	4,447,858	1,311,267	7,276	1,318,543
Philippines	11,247	185,612	196,859	321,219	1,131	322,350
Poland	59,836	19,411	79,247	356,759	150	356,909
Porto Rico	2,278	1,482	3,760	977,961	.....	977,961
Portugal	521,632	156,398	678,030	5,735,299	5	5,735,304
Portuguese Africa	.....	.....	.....	943,194	.....	943,194
Portuguese Asia	.....	.....	.....	1,683	.....	1,683
Roumania	31,796	568	32,364	568,432	16	568,448
Russia	2,892	233,989	236,881	2,457,492	1,898	2,459,390
Salvador	.....	.....	.....	75,803	.....	75,803
San Domingo	1,135,275	85	1,135,360	332,802	.....	332,802
Siam	10,242	149	10,391	250,575	.....	250,575
Spain	2,515,831	187,244	2,703,075	5,704,255	5	5,704,260
Spanish Africa	15	.....	15	65,789	.....	65,789
Sweden	1,462,917	722,172	2,185,089	4,765,818	30,672	4,796,490
Switzerland	7,407,283	510,162	7,917,445	483,919	76,541	560,460
Syria	16,279	2,089	18,368	476,229	.....	476,229
Tripoli	.....	.....	.....	732	.....	732
Turkey	573,177	1,001	574,178	146,953	.....	146,953
United States	523,846,086	344,166,143	868,012,229	499,612,145	21,654,942	521,267,087
Uruguay	4,983	4,139	9,122	1,107,631	.....	1,107,631
Venezuela	155,335	546,600	701,935	1,792,549	136	1,792,685
Virgin Islands of U.S.A.	.....	.....	.....	12,551	.....	12,551
Total Other Countries	**625,769,041**	**382,490,711**	**1,008,259,752**	**827,582,655**	**22,483,060**	**850,065,715**
Total Merchandise	**821,075,430**	**444,603,661**	**1,265,679,091**	**1,363,709,672**	**25,186,403**	**1,388,896,075**

No. 11—Comparative Statement of Goods remaining in Warehouse in 1927, 1928 and 1929

Articles		Remaining in Warehouse, March 31, 1927		Remaining in Warehouse, March 31, 1928		Remaining in Warehouse, March 31, 1929	
		Quantity	Value	Quantity	Value	Quantity	Value
Agricultural and vegetable products, mainly foods—							
Grain and products	$	.....	75,482	.....	147,120	.....	274,344
Fruits and nuts	$	.....	932,213	.....	880,631	.....	826,199
Sugar above No. 16 D.S.	Lb.	4,869,449	120,282	8,694,470	216,101	5,941,566	124,954
Sugar not above No. 16 D.S.	Lb.	69,575,855	7,242,531	56,126,740	6,513,735	40,432,648	1,088,935
Molasses	Gal.	666,891	59,287	172,517	19,685	546,432	54,526
Tea	Lb.	19,597,450	4,920,166	16,419,066	4,961,011	16,048,471	4,717,118
Coffee	Lb.	3,431,560	1,365,974	5,792,896	1,474,601	2,979,132	1,591,916
Other vegetable food products	$	.....	415,336	.....	365,539	.....	346,243
Agricultural and vegetable products, other than foods—							
Brandy	Gal.	132,155	893,318	163,654	1,326,983	177,026	1,416,411
Gin	Gal.	128,347	2,085,559	183,429	3,087,675	155,719	2,473,221
Rum	Gal.	48,941	396,748	69,525	762,537	59,539	769,774
Whiskey	Gal.	417,642	7,859,846	835,116	16,635,553	740,958	14,724,205
Wines	Gal.	336,661	1,156,074	518,349	1,845,627	448,929	1,353,289
Other Spirits	Gal.	108,304	290,028	139,967	487,623	148,997	290,298
Tobacco, unmanufactured	$	.....	1,187,262	.....	1,693,807	.....	1,675,065
Tobacco, manufactures of	$	.....	72,293	.....	84,208	.....	113,657
Vegetable products, n.o.p.	$	.....	145,424	.....	162,349	.....	184,142
Animals and animal products—							
Fish	$	.....	410,980	.....	258,633	.....	342,715
Leather	$	.....	106,318	.....	80,460	.....	115,381
Other animal products	$	.....	353,161	.....	362,885	.....	521,743
Fibres, textiles and textile products—							
Cotton	$	.....	911,042	.....	915,132	.....	758,841
Flax	$	.....	179,148	.....	89,288	.....	124,123
Silk	$	.....	814,054	.....	979,885	.....	848,531
Wool	$	.....	818,700	.....	1,350,254	.....	1,471,567
Other fibres and textile products	$	.....	339,005	.....	451,383	.....	568,748
Wood and paper products—							
Wood	$	.....	273,104	.....	262,695	.....	254,360
Paper	$	.....	513,327	.....	413,205	.....	377,872
Iron and steel and manufactures—							
Automobiles	No.	283	336,213	577	656,462	485	615,562
Other iron and steel manufactures	$	.....	1,766,584	.....	1,621,450	.....	1,799,380
Other ores, metals and metal manufactures	$	.....	420,827	.....	550,660	.....	335,175
Non-metallic minerals and products—							
Coal	Tons	1,867,981	3,531,353	1,704,874	3,032,470	1,395,247	2,631,106
Glass	$	.....	78,786	.....	93,734	.....	74,566
Oil	$	.....	762,578	.....	526,986	.....	378,985
Other non-metallic minerals and products	$	.....	72,233	.....	107,160	.....	82,573
Chemicals and chemical products	$	.....	462,473	.....	895,897	.....	548,149
Miscellaneous commodities	$	.....	1,002,979	.....	1,028,606	.....	1,011,224
Total		.....	**42,370,688**	.....	**54,342,030**	.....	**44,884,898**

No. 12—Abstract by Countries, of Imports entered for Consumption Dutiable and Free

Countries	Entered for Home Consumption									
	General Tariff		Preferential Tariff		Treaty Rates		Total Dutiable	Total Free	Grand Total	
	Value	Duty	Value	Duty	Value	Duty	Value	Value	Value	Duty
	$	$	$	$	$	$	$	$	$	$
British Empire										
United Kingdom	40,358,452	18,279,753 10	112,529,249	21,341,363 01	1,569,530	359,564 11	154,457,231	39,584,150	194,041,381	39,980,680 22
Aden	21,939	3,349 42					21,939		21,939	3,349 42
Australia	28,068	6,293 55	1,522,791	115,707 38	49,641	11,768 75	1,600,500	1,884,336	3,484,836	133,769 68
Barbados	16,061	4,747 64	3,644,459	344,012 05			3,660,520	1,538,677	5,199,197	348,759 69
Bermuda	10,540	3,167 38	6,711	978 86			17,251	44,520	61,771	4,146 24
British East Africa	4	1 20	236,617	26,673 74			236,621	61,062	297,683	26,674 94
" South Africa	2,299	1,010 71	44,289	3,056 40			46,588	233,679	280,267	4,067 11
" West Africa, other	6,356	1,120 00			88,878	12,450 00	95,234	839	96,073	13,570 00
" Guiana	44,343	13,307 05	4,783,879	560,848 97			4,828,222	45,015	4,873,237	574,156 02
" Honduras	1,320	396 00	42	9 28			1,362	259,157	260,519	405 28
" India	139,839	26,906 19	3,910,201	801,991 34	1,453	292 80	4,051,493	6,315,055	10,366,548	829,190 33
" East Indies, other	128	25 60					128	1,611	1,739	25 60
" West Indies, other	245,980	150,565 40	1,207,499	112,547 76	18	3 42	1,453,497	624,342	2,077,839	263,116 58
" Straits Settlements	32,004	5,915 80	559,262	64,125 89	4,652	856 68	595,918	1,419,289	2,015,207	70,898 37
" Sudan								12,180	12,180	
Ceylon	15,737	5,032 54	2,303,039	525,280 11	115	34 50	2,318,891	210,249	2,529,140	530,347 15
Fiji Islands	22	15 00	5,696,486	506,393 47			5,696,508	1,404	5,697,912	506,408 47
Gibraltar	75	26 25			85	23 14	160		160	49 39
Gold Coast			110	19 80	176,179	20,508 00	176,289	951,332	1,127,621	20,527 80
Hong Kong	1,020,689	303,032 25			54,270	13,793 81	1,074,959	327,543	1,402,502	316,826 06
Iraq	31,029	4,075 52					31,029	100	31,129	4,075 52
Irish Free State	4,603	3,015 04	26,609	5,688 06	916	101 58	32,128	26,747	58,875	8,804 68
Jamaica	16,100	7,767 06	2,999,095	559,869 16	30	5 40	3,015,225	1,775,070	4,790,295	567,641 62
Malta	49	73 75			241	66 28	290	2,333	2,623	140 03
Newfoundland	176,354	46,853 40	964	147 43	106	23 90	177,424	2,335,982	2,513,406	47,024 73
New Zealand	222,607	24,928 04	8,752,863	262,835 32	8,849	1,735 45	8,984,319	3,786,875	12,771,194	289,498 81
Nigeria	10	1 75			195	24 00	205	195	400	25 75
Palestine	22,639	16,756 63			815	186 07	23,454	1,709	25,163	16,942 70
Sierra Leone								2,445	2,445	
Trinidad and Tobago	12,175	3,578 65	2,653,776	263,099 80	43,053	5,069 52	2,709,004	667,054	3,376,058	271,747 97
Total British Empire	**42,429,422**	**18,911,714 92**	**159,877,941**	**25,494,647 83**	**1,999,026**	**426,507 41**	**195,306,389**	**62,112,950**	**257,419,339**	**44,832,870 16**

OTHER COUNTRIES										
Abyssinia	32,245	4,138 14					32,245	50	32,295	4,138 14
Alaska	91,108	10,311 98					91,108	53,902	145,010	10,311 98
Albania								1,500	1,500	
Argentina	1,473,818	138,426 34			437,794	87,946 59	1,911,612	5,515,956	7,427,568	226,372 93
Austria	652,687	190,960 29					652,687	25,506	678,193	190,960 29
Azores and Madeira	52,361	18,103 81			32,432	8,749 22	84,793	11	84,804	26,853 03
Belgium	2,819,199	495,699 64			6,090,403	1,177,140 40	8,909,602	3,104,936	12,014,538	1,672,840 04
Brazil	1,724,551	214,756 25					1,724,551	1,763	1,726,314	244,756 25
Canary Islands	5,478	1,901 70			1,582	442 47	7,060		7,060	2,344 17
Chile								379,453	379,453	
China	2,370,059	762,737 21					2,370,059	725,237	3,095,296	762,737 21
Colombia	922,915	104,038 75					922,915	5,926,493	6,849,408	104,038 75
Costa Rica	74,437	7,994 10					74,437	625	75,062	7,994 10
Cuba	3,978,010	2,367,534 99			1,160	348 00	3,979,170	924,336	4,903,506	2,367,882 99
Czecho-Slovakia	951,780	239,075 53			2,307,485	595,473 74	3,259,265	38,328	3,297,593	834,549 27
Denmark	35,707	11,298 34			64,336	12,212 37	100,043	52,678	152,721	23,510 71
Dutch Guiana								52,592	52,592	
" East Indies	398,690	120,032 24			49,092	13,926 22	447,782	256,881	704,663	133,958 46
" West Indies	77,962	8,234 65					77,962	95,357	173,319	8,234 65
Egypt	161,942	51,506 78					161,942	31,631	193,573	51,506 78
Esthonia	168	58 80					168		168	58 80
Finland	12,888	3,211 90			28,991	7,256 83	41,879	56,407	98,286	10,468 73
France	1,361,816	869,836 23			23,252,555	8,639,264 66	24,614,371	1,601,325	26,215,696	9,509,100 89
French Africa	4,326	1,460 48			48,749	20,038 64	53,075	100,169	153,244	21,499 12
" East Indies	350	122 50			372	75 32	722	377	1,099	197 82
" West Indies	1,719	4,620 00					1,719		1,719	4,620 00
Germany	15,806,631	4,731,043 72					15,806,631	4,991,052	20,797,683	4,731,043 72
Greece	348,694	130,357 00					348,694	22,014	370,708	130,357 00
Greenland								214,276	214,276	
Guatemala	20,372	2,243 76					20,372	612	20,984	2,243 76
Hawaii	316,297	69,333 59					316,297	633	316,930	69,333 59
Hayti	251,497	134,358 20					251,497		251,497	134,358 20
Hungary	17,409	3,098 57			220	61 75	17,629	372	18,001	3,160 32
Iceland	373	46 60					373		373	46 60
Italy	549,158	126,823 80			2,851,959	684,853 93	3,401,117	859,208	4,260,325	811,677 73
Japan	988,695	407,630 38			8,962,468	2,184,210 93	9,951,163	2,970,154	12,921,317	2,591,841 31
Jugo Slavia	21,422	5,315 01					21,422	4,121	25,543	5,315 01
Korea	1,993	596 50			366	90 59	2,359		2,359	687 09
Lettonia	1,430	400 50			3,524	713 62	4,954	17,148	22,102	1,114 12
Liberia								151	151	
Lithuania	174	43 50					174	10,127	10,301	43 50
Madagascar					1,865	137 71	1,865		1,865	137 71
Mexico	732,436	163,732 87					732,436	437,809	1,170,245	163,732 87
Miquelon and St. Pierre	8,140	21,928 03			769	163 91	8,909	46,615	55,524	22,091 94
Morocco	19,856	2,002 50			2,390	317 76	22,246	6,420	28,666	2,320 26
Netherlands	3,083,843	1,574,124 25			2,658,079	529,571 53	5,741,922	3,274,841	9,016,763	2,103,695 78
Nicaragua	3,337	462 69					3,337		3,337	462 69
Norway	45,036	13,387 70			864,740	214,813 30	909,776	79,728	989,504	228,201 00
Paraguay								5,589	5,589	
Persia	212,811	73,445 40					212,811	136,012	348,823	73,445 40
Peru	716,786	334,227 85					716,786	3,731,072	4,447,858	334,227 85
Philippines	11,247	2,089 06					11,247	185,612	196,859	2,089 06
Poland	59,836	19,489 54					59,836	19,411	79,247	19,489 54
Porto Rico	2,278	874 04					2,278	1,482	3,760	874 04
Portugal	333,503	140,617 58			188,129	55,777 33	521,632	156,398	678,030	196,394 91
Roumania	31,793	3,051 35			3	90	31,796	568	32,364	3,052 25
Russia	2,892	575 00					2,892	233,989	236,881	575 00
San Domingo	1,135,275	625,293 72					1,135,275	85	1,135,360	625,293 72

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No. 12—Abstract by Countries, of Imports entered for Consumption Dutiable and Free—*Concluded*

Countries	Entered for Home Consumption									
	General Tariff		Preferential Tariff		Treaty Rates		Total Dutiable	Total Free	Grand Total	
	Value	Duty	Value	Duty	Value	Duty	Value	Value	Value	Duty
	$	$	$	$	$	$	$	$	$	$
Siam	10,242	1,699 50					10,242	149	10,391	1,699 50
Spain	872,902	198,842 00			1,642,929	349,301 42	2,515,831	187,244	2,703,075	548,143 42
Spanish Africa					15	6 96	15		15	6 96
Sweden	334,413	55,739 80			1,128,504	252,064 34	1,462,917	722,172	2,185,089	307,804 14
Switzerland	1,683,017	261,158 30			5,724,266	1,501,422 60	7,407,283	510,162	7,917,445	1,762,580 90
Syria	14,194	3,982 74			2,085	540 55	16,279	2,089	18,368	4,523 29
Turkey	573,177	142,971 31					573,177	1,001	574,178	142,971 31
United States	523,846,086	122,779,384 44					523,846,086	344,166,143	868,012,229	122,779,384 44
Uruguay	4,983	1,329 98					4,983	4,139	9,122	1,329 98
Venezuela	155,335	19,804 77					155,335	546,600	701,935	19,804 77
Total Other Countries	**569,421,779**	**137,707,566 20**			**56,347,262**	**16,336,923 59**	**625,769,041**	**382,490,711**	**1,008,259,752**	**154,044,489 79**
Duty on articles lower than home trade price		472,427 49								472,427 49
Additional duties		1,129,718 02								1,129,718 02
Grand Total, Merchandise	**611,851,201**	**158,221,426 63**	**150,877,941**	**25,494,647 83**	**58,346,288**	**16,763,431 00**	**821,075,430**	**444,603,661**	**1,265,679,091**	**200,479,505 46**
Goods admitted Free under Preferential tariff only.—										
From United Kingdom		10,864,569								
Other Countries		13,447,568								
Total		**24,312,137**								

No. 13—ABSTRACT of the Total Value of Exports by Countries

Countries	Goods the produce of Canada	Goods not the produce of Canada	Total Exports
	$	$	$
BRITISH EMPIRE			
United Kingdom	429,730,485	1,930,456	431,660,941
Aden	40,906	.....	40,906
Australia	19,470,305	9,718	19,480,023
Barbados	1,681,950	29,489	1,711,439
Bermuda	1,628,003	45,389	1,673,392
British East Africa	1,568,171	.....	1,568,171
" South Africa	12,231,773	13,463	12,245,236
" West Africa, other	1,756	.....	1,756
" Guiana	2,238,506	50,210	2,288,716
" Honduras	900,034	24,684	924,718
" India	11,858,436	4,039	11,862,475
" East Indies, other	8,526	407	8,933
" West Indies, other	4,656,219	41,030	4,697,249
" Oceania, other	78,051	379	78,430
" Straits Settlements	1,203,909	3,003	1,206,912
" Sudan	160,704	.....	160,704
Ceylon	661,793	.....	661,793
Falkland Islands	283	.....	283
Fiji Islands	329,797	1,400	331,197
Gambia	30,482	.....	30,482
Gibraltar	75,391	.....	75,391
Gold Coast	595,655	.....	595,655
Hong Kong	2,837,463	21,616	2,859,079
Iraq	137,729	.....	137,729
Irish Free State	4,144,743	1,613	4,146,356
Jamaica	5,266,083	55,689	5,321,772
Malta	1,110,143	8	1,110,151
Newfoundland	11,160,516	401,945	11,562,455
New Zealand	17,357,763	10,540	17,368,303
Nigeria	541,284	4,450	545,734
Palestine	189,952	.....	189,952
Sierra Leone	76,641	.....	76,641
Trinidad and Tobago	4,153,571	53,815	4,207,386
Total British Empire	**536,127,017**	**2,703,343**	**538,830,360**
OTHER COUNTRIES			
Abyssinia	7,024	.....	7,024
Alaska	411,836	24,854	436,690
Argentina	14,493,191	607	14,493,798
Austria	349,701	1,644	351,345
Azores and Madeira	187,199	.....	187,199
Belgian Kongo	189,180	.....	189,180
Belgium	27,301,384	149,680	27,451,064
Bolivia	87,604	747	88,351
Brazil	5,872,940	6,885	5,879,825
Bulgaria	44,672	.....	44,672
Canary Islands	71,374	.....	71,374
Chile	2,403,442	.....	2,403,442
China	24,242,507	3,785	24,246,292
Colombia	1,797,393	4,487	1,801,880
Costa Rica	184,773	2,415	187,188
Cuba	4,442,953	76,778	4,519,731
Czecho-Slovakia	1,703,825	3,798	1,707,623
Denmark	5,981,035	2,862	5,983,897
Dutch Guiana	123,580	.....	123,580
" East Indies	3,605,367	330	3,605,697
" West Indies	185,044	902	185,946
Ecuador	139,874	324	140,198
Egypt	2,845,973	24	2,845,997
Esthonia	88,680	.....	88,680
Finland	2,122,129	540	2,122,669
France	16,131,188	112,559	16,243,747
French Africa	475,026	.....	475,026
" Guiana	53,017	.....	53,017
" East Indies	52,055	416	52,471
" West Indies	511,374	56	511,430
" Oceania	40,042	.....	40,042

No. 13—Abstract of the Total Value of Exports by Countries—*Concluded*

Countries	Goods the produce of Canada	Goods not the produce of Canada	Total exports
	$	$	$
Other Countries—Con.			
Germany	46,708,804	170,291	46,879,095
Greece	11,850,771	.....	11,850,771
Guam, Tuluita and Wake Islands	58	.....	58
Guatemala	191,930	81	192,011
Hawaii	37,262	8,375	45,637
Hayti	394,791	.....	394,791
Honduras	235,957	425	236,382
Hungary	134,026	.....	134,026
Iceland	36,990	.....	36,990
Italy	23,024,899	3,933	23,028,832
Italian Africa	12,974	.....	12,974
Japan	42,099,968	6,985	42,106,953
Jugo Slavia	48,829	.....	48,829
Korea	160,995	.....	160,995
Lettonia	34,315	.....	34,315
Liberia	41,898	.....	41,898
Lithuania	7,239	.....	7,239
Madagascar	36,425	.....	36,425
Mexico	2,675,985	1,256	2,677,241
Miquelon and St. Pierre	2,729,124	23,360	2,752,484
Morocco	383,699	.....	383,699
Netherlands	44,366,888	98,976	44,465,864
Nicaragua	66,562	.....	66,562
Norway	7,435,537	1,591	7,437,128
Panama	1,040,519	1,322	1,041,841
Paraguay	96,194	.....	96,194
Persia	83,577	.....	83,577
Peru	1,311,267	7,276	1,318,543
Philippines	321,219	1,131	322,350
Poland	356,759	150	356,909
Porto Rico	977,961	.....	977,961
Portugal	5,735,299	5	5,735,304
Portuguese Africa	943,194	.....	943,194
Portuguese Asia	1,683	.....	1,683
Roumania	568,432	16	568,448
Russia	2,457,492	1,898	2,459,390
Salvador	75,803	.....	75,803
San Domingo	332,802	.....	332,802
Siam	250,575	.....	250,575
Spain	5,704,255	5	5,704,260
Spanish Africa	65,789	.....	65,789
Sweden	4,765,818	30,672	4,796,490
Switzerland	483,919	76,541	560,460
Syria	476,229	.....	476,229
Tripoli	732	.....	732
Turkey	146,953	.....	146,953
United States	499,612,145	21,654,942	521,267,087
Uruguay	1,107,631	.....	1,107,631
Venezuela	1,792,549	136	1,792,685
Virgin Islands of U.S.A.	12,551	.....	12,551
Total Other Countries	**827,582,655**	**22,483,060**	**850,065,715**
Grand Total Merchandise, Exports	**1,363,709,672**	**25,186,403**	**1,388,896,075**

PART II—EXCISE

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REPORT

OF THE

COMMISSIONER OF EXCISE

To the Hon. W. D. EULER,

Minister of National Revenue.

SIR,—Herewith I have the honour to submit statements of the Excise Revenues collected by this department during the fiscal year ended March 31, 1929, with statistics respecting the sources whence these revenues were derived. The following summary comparison shows the accrued revenues for the fiscal years ended March 31, 1925, 1926, 1927, 1928 and 1929.

—	1925	1926	1927	1928	1929
	$	$	$	$	$
Excise Duty	39,005,343	43,370,231	49,139,913	58,062,085	64,360,103
Excise Tax	89,330,838	99,228,334	106,723,328	91,662,086	84,014,166
Totals	128,336,181	142,598,565	155,863,241	149,724,171	148,374,269

DETAILS of Excise Revenue accrued during the undermentioned fiscal years:

—	1925	1926	1927	1928	1929
	$	$	$	$	$
Spirits	9,393,661	10,932,578	13,904,584	18,267,537	19,344,599
Malt-Liquor	107,734	113,933	223,833	239,245	351,440
Malt	3,540,621	3,840,774	3,811,557	4,277,066	4,756,945
Tobacco	25,421,602	27,919,051	30,638,418	34,702,359	39,307,618
Cigars	516,606	539,300	536,845	549,896	576,883
Acetic acid	100	100	150	150	150
Manufacturers in bond	17,675	17,250	17,350	17,700	17,020
Other receipts	7,344	7,245	7,176	8,170	7,673
Totals	39,005,343	43,370,231	49,139,913	58,062,123	64,362,328

The quantity of spirits produced during the fiscal year was 16,816,312 proof gallons, as compared with 11,596,200 proof gallons produced in the previous fiscal year. The raw materials taken for use in the production of spirits, during the fiscal year were as follows:—

	Lb.
Malt	39,170,372
Indian corn	106,112,316
Rye	80,449,536
Oats	228,102
Rice	84,523
Molasses	78,099,601

The transactions of the several distilleries will be found in Statement No. 7.

	Proof gal.
There was, on April 1, 1928, in process of manufacture	685,118
Manufactured during the fiscal year	16,816,312
Returned to distilleries for redistillation—In bond	2,058,542
Received into distilleries from other sources—Duty paid	293,998
Total	19,853,970

This was disposed of as follows:—

	Proof gal.
Placed in warehouse	18,794,370
Fusel oil and spirits written off	18,636
Deficiency arising from rectification	131
Remaining in process of manufacture, March 31, 1929, by actual stock taking	1,040,833
Total	19,853,970

Spirits.—The following statement shows the warehousing transactions in Spirits during the fiscal year ended March 31, 1929, and the four preceding fiscal years:—

Fiscal Years	In Warehouse at beginning of year including transits	Warehoused during the year Ex-distillery	Otherwise warehoused	Entered for consumption	Exported	Used in bonded factories	Otherwise accounted for	For redistillation	In Warehouse at end of year, including transits
	Pf. gal.	Pf. gal.	Pf. gal.	Pf. gal.	Pf. gal.	Pf. gal.	Pf. gal.	Pf. gal.	Pf. gal.
1924–1925	8,718,502	8,646,683	41,696	910,316	803,535	1,053,472	1,485,894	1,462,169	11,691,495
1925–1926	11,691,495	7,328,232	119,972	1,082,785	499,007	1,109,295	1,894,957	1,756,259	12,797,396
1926–1927	12,797,396	10,842,001	156,677	1,404,111	571,792	1,170,059	2,438,928	1,810,783	16,400,401
1927–1928	16,400,401	13,851,317	11,016	1,896,357	579,420	1,069,622	3,101,771	1,847,567	21,767,997
Totals	49,607,794	40,667,633	329,361	5,293,569	2,453,754	4,402,448	8,921,550	6,876,778	62,657,289
Average	12,401,949	10,167,058	82,340	1,323,392	613,438	1,100,612	2,230,388	1,719,195	15,664,322
1928–1929	21,767,997	18,794,370	33,063	2,016,802	1,143,276	1,034,875	3,495,228	2,058,542	30,846,707

The foreign demand for Canadian distillery products is greater than the average of the last four years, the quantities exported being as follows:—

	Proof gal.
1924–1925	803,535
1925–1926	499,007
1926–1927	571,792
1927–1928	579,420
1928–1929	1,143,276

The following statement shows the entire quantities of spirits upon which duties were collected during the several fiscal years recited therein.

Fiscal Years	Canadian Spirits		Imported Spirits used in Bonded Factories	Total quantities upon which duty was collected	Revenue accrued including License Fees
	Paid duty Ex-distillery	Paid duty Ex-warehouse			
	Pf. gal.	Pf. gal.	Pf. gal.	Pf. gal.	$
1924–1925	3,795	1,923,605	40,183	1,967,583	9,393,661
1925–1926	6,153	2,072,490	119,590	2,198,233	10,932,578
1926–1927	1,585	2,417,759	156,381	2,575,725	13,904,554
1927–1928	3,818	2,956,946	9,033	2,969,797	18,267,537
Totals	15,351	9,370,800	325,187	9,711,338	52,498,330
Average	3,838	2,342,700	81,297	2,427,835	13,124,582
1928–1929	131	3,018,634	33,043	3,051,808	19,344,599

Malt.—The following statement shows the transactions in Malt during the fiscal year ended March 31, 1929, and the four preceding fiscal years:—

Fiscal Years	In Warehouse at beginning of year, including transits	Manufactured during the year	Imported	Increase	Entered for consumption	Exported	Otherwise accounted for	In Warehouse at end of year, including transits	Revenue accrued including License Fees
	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	$
1924–1925	16,296,816	134,056,684	17,035,532	501,757	118,231,171	5,864,393	9,782,976	34,012,249	3,540,621
1925–1926	34,012,249	115,810,397	22,910,071	300,092	127,789,729	4,664,150	10,600,197	29,978,733	3,840,774
1926–1927	29,978,733	117,780,954	21,647,932	636,019	126,967,976	6,304,684	18,417,736	18,353,242	3,811,557
1927–1928	18,353,242	145,835,237	32,686,029	848,140	142,543,947	3,274,082	31,048,607	20,856,012	4,277,066
Totals	98,641,040	513,483,272	94,279,564	2,286,008	515,532,823	20,107,309	69,849,516	103,200,236	15,470,018
Average	24,660,260	128,370,818	23,569,891	571,502	128,883,206	5,026,827	17,462,379	25,800,059	3,867,504
1928–1929	20,856,012	178,935,873	41,115,447	998,422	158,486,816	2,487,823	44,552,437	36,378,678	4,756,945

Tobacco.—The following statement shows the transactions in Tobacco, cigarettes and snuff during the fiscal year ended March 31, 1929 and the four preceding fiscal years:—

Fiscal Years	In Warehouse at beginning of year, including transits	Manufactured during the year	Entered for consumption	Exported	Otherwise accounted for	In Warehouse at end of year, including transits	Raw Leaf entered for consumption	Canada Twist entered for consumption	Total Tobacco entered for consumption	Other Materials entered for consumption	Revenue accrued, including License Fees
	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	$
1924–1925	419,630	28,683,812	28,455,565	146,721	62,679	437,476	14,873,162	166	43,328,893	.....	25,421,602
1925–1926	437,476	30,243,894	30,245,627	121,573	47,871	266,299	15,471,377	200	45,717,204	18,472	27,919,037
1926–1927	266,299	31,729,243	31,591,732	299,273	16,162	88,375	15,489,811	40	47,081,583	23,388	30,638,418
1927–1928	88,375	34,153,685	33,688,815	234,005	18,910	300,330	16,539,478	.....	50,228,293	.....	34,702,359
Totals	1,211,780	124,810,634	123,981,739	801,572	145,622	1,092,480	62,373,828	406	186,355,973	41,860	118,681,416
Average	302,945	31,202,658	30,995,435	200,393	36,405	273,120	15,593,457	102	46,588,993	10,465	29,670,354
1928–1929	300,330	36,043,827	35,795,662	141,457	11,728	395,310	17,834,926	60	53,630,648	.....	39,307,618

Cigars.—The following statement shows the transactions in Cigars during the fiscal year ended March 31, 1929, and the four preceding fiscal years:—

Fiscal Years	In Warehouse at beginning of year, including transits	Manufactured during the year	Assessments to bring production up to standard	Entered for Consumption	Exported	Otherwise accounted for	In Warehouse at end of year, including transits	Revenue accrued, including License Fees
	No.	No.	No.	No.	No.	No.	No.	$
1924–1925	13,499,295	167,114,719	938,968	168,097,387	107,050	.....	13,348,545	516,606
1925–1926	13,348,545	175,658,048	627,450	174,363,188	100,570	76,900	15,093,385	539,300
1926–1927	15,093,385	175,433,456	55,427	175,835,838	88,500	19,375	15,138,555	536,845
1927–1928	15,138,555	180,824,419	66,934	181,797,548	107,465	3,750	14,121,145	549,896
Totals	**57,079,780**	**699,030,642**	**1,688,779**	**699,593,961**	**403,585**	**100,025**	**57,701,630**	**2,142,647**
Average	14,269,945	174,757,660	422,195	174,898,490	100,896	25,006	14,425,407	535,662
1928–1929	14,121,145	194,596,829	85,139	190,981,166	125,750	3,500	17,692,877	576,883

Inspection of Petroleum.—The quantity of Petroleum and Naphtha inspected during the fiscal year was as follows:—

	Galls.
Petroleum	74,752,368
Napththa	423,754,807
Total	498,507 175

GEO. W. TAYLOR,
Commissioner of Excise.

DEPARTMENT OF NATIONAL REVENUE,
OTTAWA, SEPTEMBER 25th, 1929.

No. 1—TABLE showing the Annual Consumption, per head, of the undermentioned articles, paying Excise and Customs Duties, and Revenue, per head, derived annually.

Years	Dominion of Canada							
	Quantity				Duty			
	Spirits	Beer	Wines	Tobacco	Spirits	Beer	Wines	Tobacco
	Galls.	Galls.	Galls.	Lb.	$	$	$	$
1869	1·124	2·290	·115	1·755	·761	·092	·037	·193
1870	1·434	2·163	·195	2·190	·962	·085	·049	·259
1871	1·578	2·490	·259	2·052	1·059	·095	·056	·336
1872	1·723	2·774	·257	2·481	1·160	·108	·070	·422
1873	1·682	3·188	·238	1·999	1·135	·120	·066	·350
1874	1·994	3·012	·288	2·566	1·363	·119	·086	·442
1875	1·394	3·091	·149	1·995	1·127	·114	·069	·428
1876	1·204	2·454	·177	2·316	1·182	·098	·075	·513
1877	·975	2·322	·096	2·051	·949	·109	·057	·446
1878	·960	2·169	·096	1·976	·927	·147	·052	·439
1879	1·131	2·209	·104	1·954	1·005	·125	·057	·449
1880	·715	2·248	·077	1·036	·772	·081	·055	·428
1881	·922	2·298	·099	2·935	·990	·081	·073	·443
1882	1·009	2·747	·120	2·150	1·084	·098	·092	·485
1883	1·090	2·882	·135	2·280	1·186	·103	·097	·473
1884	·998	2·924	·117	2·476	1·074	·104	·082	·365
1885	1·126	2·639	·109	2·623	1·198	·111	·074	·393
1886	·711	2·839	·110	2·052	1·007	·091	·074	·502
1887	·746	3·084	·095	2·062	1·045	·100	·066	·514
1888	·645	3·247	·094	2·093	·944	·110	·066	·509
1889	·776	3·263	·097	1·153	1·107	·114	·068	·529
1890	·883	3·360	·104	2·143	1·257	·121	·072	·539
1891	·745	3·790	·111	2·292	1·094	·137	·080	·590
1892	·701	3·516	·101	2·291	1·156	·211	·075	·680
1893	·740	3·485	·094	2·314	1·235	·218	·070	·691
1894	·742	3·722	·089	2·264	1·235	·205	·060	·683
1895	·666	3·471	·090	2·163	1·124	·161	·056	·645
1896	·623	3·528	·070	2·120	1·159	·164	·047	·639
1897	·723	3·469	·084	2·243	1·341	·213	·041	·671
1898	·536	3·808	·082	2·358	1·306	·126	·041	·615
1899	·661	3·995	·086	2·174	1·367	·174	·045	·841
1900	·701	4·364	·085	2·300	1·455	·185	·044	·853
1901	·757	4·680	·099	2·375	1·574	·195	·047	·864
1902	·786	5·035	·090	2·371	1·631	·211	·048	·902
1903	·848	4·592	·094	2·483	1·766	·200	·049	·967
1904	·917	4·739	·092	2·664	1·913	·217	·049	1·005
1905	·895	5·123	·093	2·768	1·898	·214	·049	1·036
1906	·898	5·484	·095	2·898	1·879	·238	·052	1·100
*1907 (nine months)	·977	5·765	·095	3·048	2·035	·257	·054	1·317
1908	·939	6·146	·102	3·066	1·965	·268	·057	1·194
1909	·860	5·708	·091	3·105	1·794	·241	·050	1·101
1910	·883	5·713	·105	3·183	1·843	·242	·057	1·059
1911	·948	5·999	·114	3·323	1·988	·257	·059	1·157
1912	1·030	6·598	·114	3·679	2·170	·288	·063	1·336
1913	1·112	7·005	·131	3·818	2·340	·320	·076	1·462
1914	1·061	7·200	·124	3·711	2·249	·328	·069	1·438
1915	·872	6·071	·095	3·427	2·086	·379	·051	1·361
1916	·745	4·950	·062	3·329	1·951	·362	·033	1·454
1917	·698	4·188	·061	3·330	1·788	·304	·033	1·520
1918	·699	3·414	·061	3·612	1·810	·228	·036	1·698
1919	·391	2·948	·025	3·109	·942	·179	·015	2·520
1920	·624	4·100	·078	3·745	1·586	·243	·056	3·541
1921	·857	3·954	·077	3·272	2·256	·292	·074	3·245
1922	·360	4·375	·037	3·434	1·859	·308	·049	3·254
1923	·219	4·028	·037	3·243	2·006	·287	·057	2·883
1924	·239	4·790	·062	3·382	2·229	·372	·081	2·902
1925	·228	5·223	·066	3·317	2·109	·380	·086	2·884
1926	·270	5·617	·074	3·468	2·505	·405	·092	3·118
1927	·323	5·525	·091	3·603	2·982	·413	·106	3·395
1928	·451	6·070	·122	3·727	4·161	·457	·170	3·726
1929	·458	6·829	·120	3·953	4·486	·510	·177	4·210
Average	·852	4·077	·107	2·677	1·599	·208	·064	1·213

No. 2—Collection in Ports on account of Excise Duties. Amount collected during fiscal year ended March 31, 1929

Ports	Spirits		Malt	Cigars	Manufactured Tobacco		Foreign Leaf		Canada Twist	Malt Liquor	Licenses	Total
	Potable	Non-potable			Cigarettes	Tobacco	Unstemmed	Stemmed				
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Amherstburg		17,767 74				717 00					108 00	18,592 74
Belleville	2,189,731 33		6,024 00								700 00	2,196,455 33
Brantford		510 84	16,854 00								204 00	17,568 84
Bridgeburg	17 16										50 00	67 16
Chatham		1,901 75							9 00		54 00	1,964 75
Cobourg		16,399 16									125 00	16,524 16
Collingwood											25 00	25 00
Cornwall		681 12									87 50	768 62
Ft. Frances			8,400 00								52 00	8,452 00
Ft. William		389 49	10,138 44								77 00	10,604 93
Galt			16,226 10							5,269 35		21,495 45
Goderich											2 00	2 00
Guelph			82,986 87							22,748 70	277 00	106,012 57
Hamilton	78,693 66	24,163 84	58,436 91	337 35	3,207,656 59	147,826 50	514,950 80	10,760 40		1,220 10	946 50	4,044,992 65
Kenora			3,520 65							410 55	50 00	3,981 20
Kingston		5,242 54	13,143 30								175 00	18,560 84
Kitchener	722,564 71	958 32	77,720 16	237 45			66 00				575 00	802,121 64
Lindsay	43,998 02	170 28	3,511 23								278 00	47,957 53
London	63,861 67	9,824 12	381,099 15	25,971 25		1,294 00	47,544 80	3,099 60		134,589 75	1,227 00	668,511 34
Niagara Falls		487 08		184 50			100 00				150 00	921 58
North Bay			3,000 00								100 00	3,100 00
Orillia											1 00	1 00
Oshawa											27 00	27 00
Ottawa	352,974 55	62,671 78	40,140 00						3 00		572 00	456,361 33
Owen Sound				1,272 45			460 00				50 00	1,782 45
Parry Sound											2 00	2 00
Peterboro		601 44	2,977 50								100 00	3,678 94
Port Arthur			14,160 00								50 00	14,210 00
Port Hope		859 32									75 00	934 32
Prescott	349,007 31										550 00	349,557 31
Sarnia			5,322 39							841 65	577 00	6,741 04
Sault Ste. Marie			12,237 30	142 80			1,035 20				100 00	13,515 30
Simcoe											25 00	25 00
Stratford			1,149 54	35 40							100 00	1,284 94
Sudbury			31,503 30								100 00	31,603 30
St. Catharines			25,117 17	176 25			140 00				150 00	25,583 42
St. Thomas		266 52		438 30			529 20				304 00	1,538 02
Toronto	1,820,724 81	355,152 28	208,308 94	94,968 08	1,983 30	2,557 20	134,026 20	139,290 00		22,040 10	8,816 50	2,787,867 41
Trenton			2,040 00									2,040 00
Wallaceburg					1,356 12	985 30	1,133 90				52 00	3,527 32
Welland	4,106 43		12,870 27	95 55			18 80				350 00	17,441 05
Windsor	5,481,206 43	65,712 47	262,614 39	209 25			206 60	395 40		1,402 65	1,850 00	5,813,597 19
Woodstock		2,644 08									50 00	2,694 08
Total Ontario	11,106,886 08	566,404 17	1,299,501 61	124,068 63	3,210,996 01	153,380 00	700,211 50	153,545 40	12 00	188,522 85	19,164 50	17,522,692 75

Chicoutimi		4,894 56		63 01			74 00				200 00	5,231 57
Drummondville											25 00	25 00
Granby				62,584 35		945,973 20	631,012 00	928 20			450 00	1,640,947 75
Hull											28 00	28 00
Montreal	3,535,437 56	361,703 86	2,095,520 97	345,708 85	24,436,291 96	2,720,039 27	5,418,927 40	233,507 60		60,487 50	11,534 50	39,219,159 47
Quebec	808,692 43	22,888 05	68,040 00	8,590 11	3,420 00	514,099 80	74,670 80	49 80			1,179 00	1,501,629 99
Shawinigan Falls		148 50				495 00					179 00	822 50
Sherbrooke		4,063 75	6,858 48	542 58			377 60	519 00			425 00	12,786 41
Sorel	391 75		58 05								250 00	699 80
St. Hyacinthe	4,109 12			2,473 50			7,532 40	10,122 00			304 00	24,541 02
St. Johns				21,297 56		1,138 00	10,623 40				102 00	33,160 96
Sutton		297 00									50 00	347 00
Three Rivers		205 42				18,028 00					210 00	18,443 42
Valleyfield		1,352 73	3,000 00								100 00	4,452 73
Total Quebec	4,348,630 86	395,553 87	2,173,477 50	441,259 96	24,439,711 96	4,199,773 27	6,143,217 60	245,126 60		60,487 50	15,036 50	42,462,275 62
Fredericton	174,360 16										50 00	174,410 16
St. John		18,823 13	13,109 73	367 47			185 20	63 60			879 00	33,428 13
St. Stephen		1,207 80									100 00	1,307 80
Woodstock		9,266 40									150 00	9,416 40
Total New Brunswick	174,360 16	29,297 33	13,109 73	367 47			185 20	63 60			1,179 00	218,562 49
Amherst											27 00	27 00
Digby											2 00	2 00
Halifax	19,903 20	5,151 89	22,860 00								428 00	48,343 09
Sydney											2 00	2 00
Yarmouth		170 28		651 16			504 00				100 00	1,425 44
Total Nova Scotia	19,903 20	5,322 17	22,860 00	651 16			504 00				559 00	49,799 53
Charlottetown, P.E.I.		99 00				36,099 60	240 40				150 00	36,589 00
Brandon			14,361 00								125 00	14,486 00
Portage la Prairie											6 00	6 00
Winnipeg	322,461 63	126,121 20	369,588 30			1,750 40	2,977 30			16,525 65	3,077 00	842,501 48
Total Manitoba	322,461 63	126,121 20	383,949 30			1,750 40	2,977 30			16,525 65	3,208 00	856,993 48
Moose Jaw			15,039 30							3,633 75	114 00	18,787 05
North Portal			19,928 67								50 00	19,978 67
Prince Albert			30,255 00							14,258 70	50 00	44,563 70
Regina	443,223 30	160 40	53,384 61								384 00	497,152 31
Saskatoon	14 77		55,817 40								266 00	56,098 17
Total Saskatchewan	443,238 07	160 40	174,424 98							17,892 45	864 00	636,579 90
Calgary	198,705 38	4,405 87	178,644 30	323 70			235 80	3 00			704 00	383,022 05
Edmonton	144,763 27	11,172 41	95,586 00							2,766 15	553 00	254,840 83
Lethbridge			132,450 00							28,861 20	103 00	161,414 20
Medicine Hat			792 00								50 00	842 00
Total Alberta	343,468 65	15,578 28	407,472 30	323 70			235 80	3 00		31,627 35	1,410 00	800,119 08

No. 2—Collection in Ports on account of Excise Duties. Amount collected during fiscal year ended March 31, 1929—*Con.*

Ports	Spirits		Malt	Cigars	Manufactured Tobacco		Foreign Leaf		Canada Twist	Malt Liquor	Licenses	Total
	Potable	Non-potable			Cigarettes	Tobacco	Unstemmed	Stemmed				
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Cranbrook			10,803 00								50 00	10,853 00
Fernie			12,090 00								50 00	12,140 00
Nanaimo				229 05			452 00				100 00	781 05
Nelson			13,266 00								100 00	13,366 00
New Westminster	319,247 24		52,099 11	303 00			617 20	102 60		22,762 65	400 00	395,531 80
Penticton			3,600 00								50 00	3,650 00
Revelstoke			2,712 00								100 00	2,812 00
Rossland			3,000 00								50 00	3,050 00
Vancouver	964,201 71	24,896 18	121,309 77	5,483 19		3,715 40	3,695 20	6,271 20		8,721 60	2,227 00	1,140,521 25
Victoria	129,102 16	1,185 24	61,619 40	158 93			66 40				275 00	192,407 13
Total British Columbia	1,412,551 11	26,081 42	280,499 28	6,174 17		3,715 40	4,830 80	6,373 80		31,484 25	3,402 00	1,775,112 23
Dawson, Yukon	1,309 27										70 00	1,379 27
Grand Total	**18,172,809 03**	**1,164,617 84**	**4,755,294 70**	**572,845 09**	**27,650,707 97**	**4,394,718 67**	**6,852,402 60**	**405,112 40**	**12 00**	**346,540 05**	**45,043 00**	**64,360,103 35**
SUMMARY												
Ontario	11,106,886 08	566,404 17	1,299,501 61	124,068 63	3,210,996 01	153,380 00	700,211 50	153,545 40	12 00	188,522 85	19,164 50	17,522,692 75
Quebec	4,348,630 86	395,553 87	2,173,477 50	441,259 96	24,439,711 96	4,199,773 27	6,143,217 60	245,126 60		60,487 50	15,036 50	42,462,275 62
New Brunswick	174,360 16	29,297 33	13,109 73	367 47			185 20	63 60			1,179 00	218,562 49
Nova Scotia	19,903 20	5,322 17	22,860 00	651 16			504 00				559 00	49,799 53
P.E. Island		99 00				36,099 60	240 40				150 00	36,589 00
Manitoba	322,461 63	126,121 20	383,949 30			1,750 40	2,977 30			16,525 65	3,208 00	856,993 48
Saskatchewan	443,238 07	160 40	174,424 98							17,892 45	864 00	636,579 90
Alberta	343,468 65	15,578 28	407,472 30	323 70			235 80	3 00		31,627 35	1,410 00	800,119 08
British Columbia	1,412,551 11	26,081 42	280,499 28	6,174 17		3,715 40	4,830 80	6,373 80		31,484 25	3,402 00	1,775,112 23
Yukon	1,309 27										70 00	1,379 27
Total	**18,172,809 03**	**1,164,617 84**	**4,755,294 70**	**572,845 09**	**27,650,707 97**	**4,394,718 67**	**6,852,402 60**	**405,112 40**	**12 00**	**346,540 05**	**45,043 00**	**64,360,103 35**

No. 3—Comparative Statement of Excise Duties Collected during the fiscal years ended March 31, 1928 and 1929

Provi ces	Spirits		Malt	Cigars	Manufactured Tobacco		Foreign Leaf		Canada Twist	Other Material	Malt Liquor	Licenses	Total
	Potable	Non-potable			Cigarettes	Tobacco	Unstemmed	Stemmed					
1928	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Ontario	9,446,999 86	559,302 34	1,184,483 92	122,025 29	2,676,586 67	161,590 58	701,378 00	126,105 20	.....	.....	145,858 05	18,469 00	15,142,798 91
Quebec	4,702,213 17	397,637 66	2,043,287 25	414,466 47	20,893,054 28	4,175,962 07	5,649,616 65	249,205 50	.....	4,731 10	71,036 25	16,042 00	38,617,252 40
New Brunswick	196,681 45	27,823 66	22,885 29	754 62	.....	.....	562 00	24 00	.....	.....	.....	1,377 00	250,108 02
Nova Scotia	15,646 28	4,830 44	15,156 00	612 90	.....	.....	465 20	8 40	.....	.....	.....	579 00	37,298 22
Prince Edward Island	.....	340 56	.....	.....	.....	38,014 40	.....	.....	.....	.....	.....	204 00	38,558 96
Manitoba	365,710 44	129,491 79	310,834 98	568 74	.....	2,450 00	4,811 60	57 00	.....	.....	1,650,75	3,625 00	819,200 30
Saskatchewan	453,276 67	323 49	112,657 62	10 54	.....	.....	8 40	.....	.....	.....	.....	667 50	566,944 22
Alberta	291,602 28	14,748 47	331,955 31	308 10	.....	.....	270 40	48 00	.....	.....	11,817 75	1,756 00	652,506 31
British Columbia	1,630,518 67	22,706 34	253,705 74	6,606 83	.....	3,536 80	5,263 20	5,789 40	.....	.....	3,857 25	3,825 00	1,935,809 23
Yukon	1,558 75	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	50 00	1,608 75
Totals	**17,104,207 57**	**1,157,204 75**	**4,274,966 11**	**545,353 49**	**23,569,640 95**	**4,381,553 85**	**6,362,375 45**	**381,237 59**	.....	**4,731 10**	**234,220 05**	**46,594 50**	**58,062,085 32**
1929													
Ontario	11,106,886 08	566,404 17	1,299,501 61	124,068 63	3,210,996 01	153,380 00	700,211 50	153,545 40	12 00	.....	188,522 85	19,164 50	17,522,692 75
Quebec	4,348,630 86	395,553 87	2,173,477 50	441,259 96	24,439,711 96	4,199,773 27	6,143,217 60	245,126 60	.....	.....	60,487 50	15,036 50	42,462,275 62
New Brunswick	174,360 16	29,297 33	13,109 73	367 47	.....	.....	185 20	63 60	.....	.....	.....	1,179 00	218,562 49
Nova Scotia	19,903 20	5,322 17	22,860 00	651 16	.....	.....	504 00	.....	.....	.....	.....	559 00	49,799 53
P.E. Island	.....	99 00	.....	.....	.....	36,099 60	240 40	.....	.....	.....	.....	150 00	36,589 00
Manitoba	322,461 63	126,121 20	383,949 30	.....	.....	1,750 40	2,977 30	.....	.....	.....	16,525 65	3,208 00	856,993 48
Saskatchewan	443,238 07	160 40	174,424 98	.....	.....	.....	.....	.....	.....	.....	17,892 45	864 00	636,579 90
Alberta	343,468 65	15,578 28	407,472 30	323 70	.....	.....	235 80	3 00	.....	.....	31,627 35	1,410 00	800,119 08
British Columbia	1,412,551 11	26,081 42	280,499 28	6,174 17	.....	3,715 40	4,830 80	6,373 80	.....	.....	31,484 25	3,402 00	1,775,112 23
Yukon	1,311 07	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	70 00	1,381 07
Totals	**18,172,809 03**	**1,164,617 84**	**4,755,294 70**	**572,845 09**	**27,650,707 97**	**4,394,718 67**	**6,852,402 60**	**405,112 40**	**12 00**	.....	**346,540 05**	**45,043 00**	**64,360,103 35**

EXCISE DUTY REVENUES

No. 4—Comparative Statement of Receipts for 1926-27, 1927-28 and 1928-29

——		Totals
		$ cts.
Spirits	1926–27	13,899,584 19
	1927–28	18,261,412 32
	1928–29	19,337,426 87
Malt Liquor	1926–27	218,347 05
	1927–28	234,220 05
	1928–29	346,540 05
Malt	1926–27	3,809,756 58
	1927–28	4,274,966 11
	1928–29	4,755,294 70
Tobacco	1926–27	30,635,582 90
	1927–28	34,699,538 85
	1928–29	39,302,953 64
Cigars	1926–27	531,941 27
	1927–28	545,353 49
	1928–29	572,845 09
Licenses	1926–27	43,592 50
	1927–28	46,594 50
	1928–29	45,043 00
Total Revenue	**1926–27**	**49,138,804 49**
	1927–28	**58,062,085 32**
	1928–29	**64,360,103 35**

No. 5—STATEMENT showing the quantities of the several articles subject to Excise Duty, entered for consumption during the fiscal years ended March 31, 1927, 1928, 1929, and the duty accrued thereon

Articles subject to Excise Duty	1927				1928				1929			
	Quantities			Duty	Quantities			Duty	Quantities			Duty
	Ex-manufactory	Ex-warehouse	Totals		Ex-manufactory	Ex-warehouse	Totals		Ex-manufactory	Ex-warehouse	Totals	
	P. Gals.	P. Gals.	P. Gals.	$ cts.	P. Gals.	P. Gals.	P. Gals.	$ cts.	P. Gals.	P. Gals.	P. Gals.	$ cts.
Spirits	1,585	2,574,170	2,575,755	13,899,584 19	3,818	2,965,979	2,969,797	18,261,412 32	131	3,051,677	3,051,808	19,337,973 75
	Gals.	Gals.	Gals.		Gals.	Gals.	Gals.		Gals.	Gals.	Gals.	
Malt liquor, the duty being paid on malt	50,434,297	1,291,954	51,726,251	219,708 15	57,047,374	1,343,986	58,391,360	234,220 05	64,006,514	1,712,615	65,719,129	346,540 05
	Lb.	Lb.	Lb.		Lb.	Lb.	Lb.		Lb.	Lb.	Lb.	
Malt	1,050,770	125,917,206	126,967,976	3,809,756 58	383,490	142,160,457	142,543,947	4,274,966 11	3,203	158,486,816	158,490,019	4,753,294 70
	No.	No.	No.		No.	No.	No.		No.	No.	No.	
Cigars	83,394,438	91,941,400	175,335 838	531,645 18	87,743,934	93,986,680	181,730,614	545,395 51	93,205,051	97,776,115	190,981,166	572,682 92
Cigarettes	3,203,335,910	130,663,950	3,333,999,860	20,011,204 66	3,760,184,475	166,837,850	3,927,022,325	23,569,641 00	3,857,487,995	750,012,430	4,607,500,425	27,652,168 82
	Lb.	Lb.	Lb.		Lb.	Lb.	Lb.		Lb.	Lb.	Lb.	
Canada twist	40		40	8 00					60		60	12 00
Tobacco	18,582,184	2,152,931	20,735,115	4,147,023 10	19,456,367	1,505,750	20,962,117	4,192,423 40	19,853,473	1,125,729½	20,979,202½	4,196,305 58
Snuff	854,617		854,617	170,923 40	945,630		945,630	189,126 00	993,959		993,959	198,791 80
Totals	19,436,841	2,152,931	21,589,772	24,329,159 16	20,401,997	1,505,750	21,907,747	27,951,190 40	20,847,492	1,125,729½	21,973,221½	32,047,278 20
Raw leaf tobacco, foreign		15,489,811	15,489,811	6,301,088 60		16,539,478	16,539,478	6,743,612 95		17,834,925½	17,834,925½	7,257,515 00
Other materials	23,388		23,388	5,379 24	20,570		20,570	4,731 10				
Total duties on tobacco and cigarettes				30,635,627 00				34,699,534 45				39,304,793 20
Licenses, spirits				5,000 00				6,125 00				6,625 00
" malt liquor				4,125 00				5,025 00				4,900 00
" malt				1,800 00				2,100 00				1,650 00
" cigars				5,200 00				4,500 00				4,200 00
" tobacco				2,791 00				2,825 00				2,825 00
" sundry				24,676 50				26,019 50				24,843 00
Grand total duty				**49,139,913 60**				**58,062,122 94**				**64,362,327 62**

SPIRITS

No. 6—Comparative Statement of Manufactures for

Provinces	Licenses		Material Taken					
			Grain					
	No.	Fees	Malt	Indian Corn	Rye	Oats	Wheat	Rice
1928		$	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.
Ontario	8	2,250	14,636,482	51,242,965	33,075,051	137,616	106,200	.....
Quebec	8	2,000	7,447,703	16,283,849	13,585,737	1,568	.....	.....
New Brunswick	1	250	.....	.....	.....	.....	.....	.....
Manitoba	2	625	169,790	1,236,528	88,446	.....	143,460	.....
British Columbia	4	1,000	2,862,125	10,108,242	6,868,461	.....	.....	.....
Totals	**23**	**6,125**	**25,116,100**	**78,871,584**	**53,617,695**	**139,184**	**249,660**	.....
1929								
Ontario	9	2,500	24,133,471	58,179,948	51,273,619	228,102	.....	43,123
Quebec	9	2,375	8,800,131	28,946,450	15,114,081	.....	.....	.....
New Brunswick	1	250	.....	.....	.....	.....	.....	.....
Manitoba	2	500	95,524	751,429	51,101	.....	.....	.....
British Columbia	4	1,000	6,141,246	18,234,489	14,010,735	.....	.....	41,400
Totals	**25**	**6,625**	**39,170,372**	**106,112,316**	**80,449,536**	**228,102**	.....	**84,523**

SPIRITS

the Fiscal Years ended March 31, 1928 and 1929

for Use		Used in spirits manufactured		Proof spirits manufactured	Duty collected Ex-manufactory on deficiencies and assessments		Total duty collected ex-manufactory including license fees
Total grain	Molasses	Grain	Molasses				
Lbs.	Lbs.	Lbs.	Lbs.	P. Galls.	P. Galls.	$ cts.	$ cts
99,198,314	23,721,200	98,729,282	23,596,200	7,156,709 25	28 69	259 07	2,509 07
37,318,857	23,192,271	37,263,147	22,918,671	3,098,301 07	1,002 33	9,029 30	11,029 30
.....	988,054	.....	988,054	35,456 06	.....	.....	250 00
1,638,224	.....	1,713,824	.....	102,564 25	.....	.....	625 00
19,838,828	1,899,970	19,885,476	1,899,970	1,203,169 45	2,786 45	25,133 78	26,133 78
157,994,223	**49,801,495**	**157,591,729**	**49,402,895**	**11,596,200 08**	**3,817 47**	**34,422 15**	**40,547 15**
133,858,263	35,835,824	133,713,064	36,287,024	9,797,340 26	23 64	212 76	2,712 76
52,860,662	38,299,807	52,593,332	38,299,807	4,611,139 22	107 01	965 18	3,340 18
.....	2,267,550	.....	2,267,550	86,110 71	.....	.....	250 00
898,054	.....	850,006	.....	45,208 81	.....	.....	500 00
38,427,870	1,696,420	38,256,372	1,683,520	2,276,512 68	.....	.....	1,000 00
226,044,849	**78,099,601**	**225,412,774**	**78,537,901**	**16,816,311 68**	**130 65**	**1,177 94**	**7,802 94**

SPIRITS

No. 7—COMPARATIVE STATEMENT showing transactions in the Distilleries in the Dominion of Canada, during the fiscal years ended March 31, 1928 and 1929

Provinces	In process, including deficiencies brought forward	Manufactured, including surpluses	Returned to distillery for redistillation	Received from other sources duty paid	Totals	Warehoused	Spirits and fusel oil written off	Deficiencies on which duty was collected	In process, including deficiencies carried forward	Totals
	P. Galls.	P. Galls.	P. Galls.	P. Galls.	P. Galls.	P. Galls.	P. Galls.	P. Galls.	P. Galls.	P. Galls.
1928										
Ontario	466,554·30	7,156,709·25	1,361,414·64	163,104·65	9,147,782·84	8,758,782·02	8,893·89	28·69	380,078·24	9,147,782·84
Quebec	286,894·84	3,098,301·07	321,037·78	79,817·96	3,786,051·65	3,564,509·17	8,759·42	1,002·33	211,780·73	3,786,051·65
New Brunswick	.....	35,456·06	.....	.....	35,456·06	13,083·39	.....	.....	22,372·67	35,456·06
Manitoba	37,685·85	102,564·25	131,800·79	1,878·86	273,929·75	260,321·19	300·47	.....	13,308·09	273,929·75
British Columbia	68,758·13	1,203,169·45	33,313·35	11,136·52	1,316,377·45	1,254,621·46	1,390·88	2,786·45	57,578·66	1,316,377·45
Totals	**859,893·12**	**11,596,200·08**	**1,847,566·56**	**255,937·99**	**14,559,597·75**	**13,851,317·23**	**19,344·66**	**3,817·47**	**685,118·39**	**14,559,597·75**
1929										
Ontario	380,078·24	9,797,340·26	1,413,714·63	72,322·58	11,663,455·71	11,134,855·01	7,911·45	23·64	520,665·61	11,663,455·71
Quebec	211,780·73	4,611,139·22	468,843·75	205,695·90	5,497,459·60	5,123,926·33	10,167·65	107·01	363,258·61	5,497,459·60
New Brunswick	22,372·67	86,110·71	.....	.....	108,483·38	51,684·70	24·85	.....	56,773·83	108,483·38
Manitoba	13,308·09	45,208·81	159,551·01	662·56	218,730·47	201,776·35	140·13	.....	16,813·99	218,730·47
British Columbia	57,578·66	2,276,512·68	16,433·24	15,316·60	2,365,841·18	2,282,127·66	392·30	.....	83,321·19	2,365,841·18
Totals	**685,118·39**	**16,816,311·68**	**2,058,542·63**	**293,997·64**	**19,853,970·34**	**18,794,370·08**	**18,636·38**	**130·65**	**1,040,833·23**	**19,853,970·34**

DR. SPIRITS

No. 8—STATEMENT of Warehouse Returns for the Fiscal Year ended March 31, 1929

Ports	Remaining in Warehouse from last year	Warehoused	Imported	Received from other Ports		Totals
				Removed during year	In Transit last year	
	P. Galls.	P. Galls.	P. Galls.	P. Galls.	P. Galls.	P. Galls.
Amherstburg	2,812·59			64,649·49		67,462·08
Belleville	4,271,470·15	6,136,123·90	16,201·75	370,265·98		10,794,061·78
Brantford	141·90			216·15		358·05
Bridgeburg						
Chatham	140·97		619·96			760·93
Cobourg	668·25			7,411·57	57·75	8,137·57
Cornwall				283·80		283·80
Fort William				742·50		742·50
Hamilton	693·44		2,912·91	32,166·18		35,772·53
Kingston	430·66			17,642·69		18,073·35
Kitchener	1,566,676·08	394,535·45		10,511·55		1,971,723·08
Lindsay	77,904,99	169,463·80		33,772·22		281,141·01
London	1,112·56			10,303·79	70·95	11,487·30
Niagara Falls				202·95		202·95
Ottawa	9,864·36		3,857·04	64,693·94		78,415·34
Peterboro	41·25			206·25		247·50
Port Hope				358·05		358·05
Prescott	694,923·06	8,227·45	7,285·75	218,472·75		928,909·01
Sarnia		186,454·53				186,454·53
St. Thomas				428·08		428·08
Toronto	3,331,184·07	1,332,901·04	1,674·12	395,213·50		5,060,972·73
Welland		12,415·11		4,246·50		16,661·61
Windsor	5,128,161·62	2,894,733·73		106,831·38		8,129,726·73
Woodstock				9,933·00		9,933·00
Total, Ontario	15,086,225·95	11,134,855·01	32·551·53	1,348,552·32	128·70	27,602,313·51
Chicoutimi				2,039·40		2,039·40
		‡19·73				
Montreal	4,228,511 27	5,117,338·85	492·33	436,850·47	2,234·49	9,785,447·14
Quebec	24,020·05			138,273·39	70·95	162,364·39
Shawinigan Falls				198·00		198·00
Sorel	51,973·13	6,587·48				58,560·61
Sherbrooke	212·85			1,663·47		1,876·32
St. Hyacinthe	188,036·40			2,286·50		190,322·90
Sutton				123·75		123·75
Three Rivers	28·57			183·15		211·72
Valleyfield				563·64		563·64
		‡19·73				
Total, Quebec	4,492,782·27	5,123,926·33	492·33	582,181·77	2,305·44	10,201,707·87
Fredericton	1,480·75			19,150·94		20,631·69
St. John	11,493·80	51,684·70		16,316·33	1,239·15	80,733·98
St. Stephen				503·25		503·25
Woodstock	70·95			3,506·25	354·75	3,931·95
Total, New Brunswick	13,045·50	51·684·70		39·476·77	1,593·90	105,800·87
Halifax	618·15			4,624·61		5,242·76
Yarmouth				70·95		70·95
Total, Nova Scotia	618·15			4,695·56		5,313·71
Charlottetown, P.E.I.				41·25		41·25
Winnipeg, Man.	204,830·48	201,776·35		200,591·66	12,268·13	619,466·62
Regina	8,138·30			52,677·39	2,860·23	63,675·92
Saskatoon						
Total, Saskatchewan	8,138·30			52,677·39	2,860·23	63,675·92
Calgary	8,962·65			33,530·02		42,492·67
Edmonton	9,664·20			39,472·41		49,136·61
Total, Alberta	18,626·85			73,002·43		91,629·28
New Westminster	1,143,881·03	1,276,618·00				2,420,499·03
Vancouver	770,349·05	1,005,509·69		47,180·87		1,823,039·61
Victoria	1,654·86			15,118·75		16,773·61
Total, British Columbia	1,915,884·94	2,282,127·69		62,299·62		4,260,312·25
Dawson, Yukon	76·19			277·10		353·29
Sundries	8,612·54					8,612·54
Grand Totals	**21,748,841·17**	**18,794,370·08** ‡19·73	**33,043·86**	**2,363,795·87**	**19,156·40**	**42,959,227·11**

‡Surplus.

SPIRITS

DR. No. 8—STATEMENT of Warehouse Returns for the

Ports	Entered for Consumption			Removed to other Ports	
	Quantity	Used in Bonded Factories	Duty	Warehoused in Ports to which removed	In Transit
	P. Galls.	P. Galls.	$ cts.	P. Galls.	P. Galls.
Amherstburg		65,996·39	17,767 74		
Belleville	242,664·34		2,189,731 33	727,154·83	5,399·16
Brantford		212·85	510 84		
Bridgeburg			17 16		
Chatham		508·88	1,901 75		
Cobourg		6,830·77	16,399·16		
Cornwall		283·80	681·12		
Fort William		371·25	389·49		
Hamilton	8,743·74	26,603·28	102,857 50	76·59	
Kingston		17,789·55	5,242 54		
Kitchener	80,197·75	328·35	723,437·08	136,072·92	3,895·72
Lindsay	4,895·07	70·95	44,168 30	5,891·74	
London	7,095·27	4,093·38	73,685·79		
Niagara Falls		202·95	487 08		
Ottawa	39,202·53	28,566·11	415,646 33		
Peterboro		247·50	601 44		
Port Hope		358·05	859 32		
Prescott	38,685·41		348,880 50	348,612·36	
Sarnia					
St. Thomas		355·36	266 52		
Toronto	201,709·31	303,443·82	2,175,877 09	197,010·24	10,600·28
Welland	456·27		4,106 43	12,513·31	
Windsor	610,853·13	31,202·84	5,546,918 90	237,543·82	4,279·83
Woodstock		9,578·25	2,644 08		
Total, Ontario	1,234,502·82	497,047·33	11,673,077 49	1,664,875·81	24,174·99
Chicoutimi		2,039·40	4,894 56		
Montreal	390,561·15	267,794·77	3,897,141 42	437,455·89	13,267·54
Quebec	89,785·12	55,466·73	831,580 48	437·06	
Shawinigan Falls		198·00	148 50		
Sorel					
Sherbrooke		1,764·12	4,033 75		
St. Hyacinthe	254·32		4,082 57	66,641·94	
Sutton		123·75	297 00		
Three Rivers		183·15	205 42		
Valleyfield		563·64	1,352 73		
Total, Quebec	480,600·59	328,133·56	4,743,766 43	504,534·89	13,267·54
Fredericton	19,348·23		174,360 16		
St. John		16,841·45	18,823 13	3,901·41	
St. Stephen		503·25	1,207 80		
Woodstock		3,861·00	9,266 40		
Total, New Brunswick	19,348·23	21,205·70	203,657 49	3,901·41	
Halifax	2,209·51	2,146·62	25,055 09		
Yarmouth		70·95	170 28		
Total, Nova Scotia	2,209·51	2,217·57	25,225 37		
Charlottetown, P.E.I.		41·25	99 00		
Winnipeg, Man	35,998·68	135,932·55	448,582 83	77,549·19	2,768·65
Regina	49,231·43	594·00	443,383 70		
Saskatoon			14 77		
Total, Saskatchewan	49,231·43	594·00	443,398 47		
Calgary	22,053·06	9,496·67	203,111 25	438·16	
Edmonton	16,080·18	25,563·96	155,935 68	658·15	
Total, Alberta	38,133·24	35,060·63	359,046 93	1,096·31	
New Westminster	35,452·75		319,247 24	39,015·87	2,290·43
Vancouver	106,838·29	14,149·80	989,097 89	72,822·39	8,285·63
Victoria	14,340·70	492·87	130,287 40		
Total, British Columbia	156,631·74	14,642·67	1,438,632 53	111,838·26	10,576·06
Dawson, Yukon	145·47		1,309 27		
Sundries					
Grand Totals	**2,016,801·71**	**1,034,875·26**	**19,336,795 81**	**2,363,795·87**	**50,787·24**

SPIRITS

Fiscal Year ended March 31, 1929

Taken for Redistillation	Free		Exported	Remaining in Warehouse	Totals
	Legal Allowance	Other			
P. Galls.	P. Galls.	P. Galls.	P. Galls.	P. Galls.	P. Galls.
				1,465·69	67,462·08
1,189,240·22	93,659·34	956,635·11	448,122·33	7,131,186·45	10,794,061·78
				145·20	358·05
				252·05	760·93
				1,306·80	8,137·57
					283·80
				371·25	742·50
				345·92	35,772·53
				283·80	18,073·35
922·70	39,904·26	5,760·95	1,464·08	1,703,176·35	1,971,723·08
29,900·42	661·00	35,261·62	3,628·77	200,831·44	281,141·01
				298·65	11,487·30
					202·95
		24·75		10,621·95	78,415·34
					247·50
					358·05
8,241·54	48,185·94	86,169·54	48,543·88	350,470·34	928,909 01
				186,454·53	186,454·53
				72·72	428·08
14,310·13	18,246·95	414,686·55	57,669·46	3,843,295·99	5,060·972·73
				3,692·03	16,661·61
171,099·62	162,627·31	5,673·47	267,344·40	6,639,102·31	8,129,726·73
				354·75	9,933·00
1,413,714·63	363,284·80	1,504,211·99	826,772·92	20,073,728·22	27,602,313·51
					2,039·40
468,843·75	63,530·71	1,303,497·60	257,369·45	6,583,126·28	9,785,447·14
		212·85		16,462·63	162,364·39
					198·00
				58,560·61	58,560·61
				112·20	1,876·32
	1,548·39		2,549·09	119,329·16	190,322·90
					123·75
				28·57	211·72
					563·64
468,843·75	65,079·10	1,303,710·45	259,918·54	6,777,619·45	10,201,707·87
				1,283·46	20,631·69
	126·38	46,214·59		13,650·15	80,733·98
					503·25
				70·95	3,931·95
	126·38	46,214·59		15,004·56	105,800·87
			8·93	877·70	5,242·76
					70·95
			8·93	877·70	5,313·71
					41·25
159,551·01	9,576·58	50,859·78		147,230·18	619,466·62
				13,850·49	63,675·92
				13,850·49	63,675·92
				10,504·78	42,492·67
				6,834·32	49,136·61
				17,339·10	91,629·28
16,433·24	14,171·33	44,140·31	2,038·13	2,266,956·97	2,420,499·03
	28,787·92	65,064·90	54,517·47	1,472,573·21	1,823,039·61
			19·82	1,920·22	16,773·61
16,433·24	42,959·25	109,205·21	56,575·42	3,741,450·40	4,260·312·25
				207·82	353·29
				8,612·54	8,612·54
2,058,542·63	**481,026·11**	**3,014,202·02**	**1,143,275·81**	**30,795,920·46**	**42,959,227·11**

SPIRITS

DR. No. 9—COMPARATIVE STATEMENT of Warehouse Returns for the Fiscal Years ended March 31, 1928 and 1929 CR.

Provinces	Remaining in Warehouse from last year	Warehoused	Imported	Received from other Ports		Totals
				Removed during year	In Transit last year	
	P. Galls.	P. Galls.	P. Galls.	P. Galls.	P. Galls.	P. Galls.
1928						
Ontario	12,074,094·17	*16·50 8,758,782·02 ‡4·22	8,583·08	1,397,237·73	12,904·48	22,251,617·98
Quebec	2,941,931·72	3,564,509·17 †1,961·90	449·76	450,681·18	3,050·14	6,962,588·09
New Brunswick	4,709·18	13,083·39		46,642·29	498·96	64,933·82
Nova Scotia	1,635·45			2,591·16	141·90	4,368·51
Prince Edward Island				141·90		141·90
Manitoba	235,482·36	260,321·19		159,932·40	6,454·27	662,190·22
Saskatchewan	12,895·13			45,101·01	1,951·80	59,947·94
Alberta	15,724·54			64,872·08	721·22	81,317·84
British Columbia	1,079,344·07	1,254,621·46		81,242·48		2,415,208·01
Yukon	249·39					249·39
Sundries	8,612·54					8,612·54
Totals	**16,374,678·55**	‡4·22 **13,851,317·23** *16·50 †1,961·90	**9,032·84**	**2,248,442·23**	**25,722·77**	**32,511,176·24**
1929						
Ontario	15,086,225·95	11,134,855·01 ‡19·73	32,551·53	1,348,552·32	128·70	27,602,313·51
Quebec	4,492,782·27	5,123,926·33	492·33	582,181·77	2,305·44	10,201,707·87
New Brunswick	13,045·50	51,684·70		39,476·77	1,593·90	105,800·87
Nova Scotia	618·15			4,695·56		5,313·71
Prince Edward Island				41·25		41·25
Manitoba	204,830·48	201,776·35		200,591·66	12,268·13	619,466·62
Saskatchewan	8,138·30			52,677·39	2,860·23	63,675·92
Alberta	18,626·85			73,002·43		91,629·28
British Columbia	1,915,884·94	2,282,127·69		62,299·62		4,260,312·25
Yukon	76·19			277·10		353·29
Sundries	8,612·54					8,612·54
Grand Totals	**21,748,841·17**	**18,794,370·08** **‡19·73**	**33,043·86**	**2,563,795·87**	**‡19,156·40**	**42,959,227·11**

*Rewarehoused. †Seizures. ‡Surplus.

Provinces	Entered for Consumption			Removed to other port		Taken for Redistillation	Free		Exported	Remaining in Warehouse	Totals
	Quantity	Used in Bonded Factories	Duty	Warehoused in ports to which removed	In Transit		Legal Allowance	Other			
1928	P. Galls.	P. Galls.	$ cts.	P. Galls.	P. Galls.	P. Galls.	P. Galls.	P. Galls.	P. Galls.	P. Galls.	P. Galls.
Ontario	1,049,825·00	498,095·89	10,006,043 13	1,781,628·24	18,214·25	1,361,414·64	389,813·92	1,594,543·47	471,856·62	15,086,225.95	22,251,617·98
Quebec	523,381·97	355,041·16	5,090,821 53	348,846·65	942·15	321,037·78	43,730·40	838,308·54	38,517·17	4,492,782·27	6,962,588·09
New Brunswick	21,830·22	16,970·37	224,505 11	.....	.....	.....	.....	13,084·80	2·93	13,045·50	64,933·82
Nova Scotia	1,737·68	2,012·68	20,476 72	.....	.....	.....	.....	.....	.....	618·15	4,368·51
Prince Edward Island	.....	141·90	340 56	.....	.....	.....	.....	.....	.....	.....	141·90
Manitoba	40,714·62	156,559·42	495,202 23	43,003·35	.....	131,800·79	5,862·23	79,419·33	.....	204,830·48	662,190·22
Saskatchewan	50,338·59	431·32	453,600 16	365·21	.....	.....	.....	674·52	.....	8,138·30	59,947·94
Alberta	32,415·39	29,339·12	306,350 75	936·48	.....	.....	.....	.....	.....	18,626·85	81,317·84
British Columbia	175,940·27	11,030·02	1,628,091 23	73,662·30	.....	33,313·35	25,020·36	111,313·63	69,043·14	1,915,884·94	2,415,208·01
Yukon	173·20	.....	1,558 75	.....	.....	.....	.....	.....	.....	76·19	249·39
Sundries	.....	.....	.....	.....	.....	.....	.....	.....	.....	8,612·54	8,612·54
Totals	**1,896,356·94**	**1,069,621·88**	**18,226,990 17**	**2,248,442·23**	**19,156·40**	**1,847,566·56**	**464,426·91**	**2,637,344·29**	**579,419·86**	**21,748,841.17**	**32,511,176·24**
1929											
Ontario	1,234,502·82	497,047·33	11,673,077 49	1,664,875·81	24,174·99	1,413,714·63	363,284·80	1,504,211·99	826,772·92	20,073,728.22	27,602,313·51
Quebec	480,600·59	328,133·56	4,743,766 43	504,534·89	13,267·54	468,843·75	65,079·10	1,303,710·45	259,918·54	6,777,619·45	10,201,707·87
New Brunswick	19,348·23	21,205·70	203,657 49	3,901·41	.....	.....	126·38	46,214·59	.....	15,004·56	105,800·87
Nova Scotia	2,209·51	2,217·57	25,225 37	.....	.....	.....	.....	.....	8·93	877·70	5,313·71
Prince Edward Island	.....	41·25	99 00	.....	.....	.....	.....	.....	.....	.....	41·25
Manitoba	35,998·68	135,932·55	448,582 83	77,549·19	2,768·65	159,551·01	9,576·58	50,859·78	.....	147,230·18	619,466·62
Saskatchewan	49,231·43	594·00	443,398 47	.....	.....	.....	.....	.....	.....	13,850·49	63,675·92
Alberta	38,133·24	35,060·63	359,046 93	1,096·31	.....	.....	.....	.....	.....	17,339·10	91,629·28
British Columbia	156,631·74	14,642·67	1,438,632 53	111,838·26	10,576·06	16,433·24	42,959·25	109,205·21	56,575·42	3,741,450·40	4,260,312·25
Yukon	145·47	.....	1,309 27	.....	.....	.....	.....	.....	.....	207·82	353·29
Sundries	.....	.....	.....	.....	.....	.....	.....	.....	.....	8,612·54	8,612·54
Grand Totals	**2,016,801·71**	**1,034,875·26**	**19,336,795 81**	**2,363,795·87**	**50,787·24**	**2,058,542·63**	**481,026·11**	**3,011,202·02**	**1,143,275·81**	**39,795,920·46**	**42,959,227·11**

	1928	1929
Total duty collected ex-manufactory and ex-warehouse	$18,261,412 32	$19,337,973 75
License fees	6,125 00	6,625 00
	$18,267,537 32	$19,344,598 75

MALT

No. 10—Comparative Statement of Manufactures for the Fiscal Years ended March 31, 1928 and 1929

Provinces	Licenses		Grain Steeped	Grain Used in Malt Manufactured	Malt			Total Duty Collected Ex-Manufactory including License Fees
	No.	Fees			Manufactured	Paid Duty	Warehoused	
1928		$	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	$ cts.
Ontario	4	750	6,240,580	5,950,180	5,039,890	.....	5,039,890	750 00
Quebec	2	500	43,303,000	43,682,200	35,488,435	.....	35,488,435	500 00
Manitoba	1	300	74,513,600	72,206,000	61,959,062	.....	61,959,062	300 00
Alberta	1	300	51,157,790	50,946,590	41,614,850	.....	41,614,850	300 00
British Columbia	2	250	2,054,791	2,054,791	1,733,000	383,490	1,349,510	11,754 70
Totals	**10**	**2,100**	**177,269,761**	**174,839,761**	**145,835,237**	**383,490**	**145,451,747**	**13,604 70**
1929								
Ontario	3	600	11,036,100	9,755,900	8,147,770	.....	8,147,770	600 00
Quebec	1	200	42,620,200	42,687,400	34,276,665	.....	34,276,665	200 00
Manitoba	2	400	112,504,810	110,941,450	92,357,285	.....	92,357,285	400 00
Alberta	1	200	51,068,520	51,058,920	42,270,630	.....	42,270,630	200 00
British Columbia	2	250	2,153,641	2,138,881	1,849,581	3,203	1,846,378	346 09
Totals	**9**	**1,650**	**219,383,271**	**216,582,551**	**178,901,931**	**3,203**	**178,898,728**	**1,746 09**

MALT

DR. No. 11—COMPARATIVE STATEMENT of Warehouse Returns for the Fiscal Years ended March 31, 1928 and 1929 CR.

Provinces	Remaining in Warehouse from last year	Warehoused	Increase	Received from other Ports: Removed during year	Received from other Ports: In Transit last year	Imported	Totals	Entered for Consumption: Quantity	Entered for Consumption: Duty	Removed to other Ports: Warehoused in Ports to which Removed	Removed to other Ports: In Transit	Exported	Free	Remaining in Warehouse	Totals
1928	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	$ cts.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.
Ontario	1,860,412	5,039,890	288,674	30,013,770	780,320	27,209,941	65,193,007	39,583,994	1,184,483 92	954,214	.....	278,933	20,376,339	3,999,527	65,193,007
Quebec	3,968,929	35,488,435	241,884	42,238,124	1,278,000	1,924,575	85,139,947	68,109,575	2,033,287 25	2,564,790	2,400	2,522,604	7,586,663	4,353,915	85,139,947
New Brunswick	.....	.....	403	703,500	109,000	5,940	818,843	762,843	22,885 29	.....	.....	.....	.....	56,000	818,843
Nova Scotia	2,000	.....	.....	489,200	54,000	.....	545,200	505,200	15,156 00	.....	.....	.....	.....	40,000	545,200
Manitoba	7,384,055	61,959,062	209,705	2,200,800	.....	868,578	72,622,200	10,358,076	310,834 98	55,838,880	1,875,820	472,545	169,710	3,907,169	72,622,200
Saskatchewan	.....	.....	.....	3,645 00	.....	109,954	3,755,254	3,755,254	112,657 62	.....	.....	.....	.....	.....	3,755,254
Alberta	2,577,710	41,614,850	107,440	5,472,200	164,800	492,182	50,429,182	11,014,147	331,955 31	33,155,345	1,524,000	.....	48,520	4,687,170	50,429,182
B. Columbia	124,016	1,349,510	34	8,575,570	50,000	2,074,859	12,173,989	8,071,368	242,201 04	825,235	.....	.....	2,867,375	410,011	12,173,989
Totals	**15,917,122**	**145,451,747**	**848,142**	**93,338,464**	**2,436,120**	**32,686,029**	**290,677,622**	**142,160,457**	**4,263,461 41**	**93,338,464**	**3,402,220**	**3,274,082**	**31,048,607**	**17,453,792**	**290,677,622**
1929															
Ontario	3,999,527	37,145 (Bondex) 8,147,770	301,435	34,011,380	694,220	31,964,381	79,155,858	43,266,279	1,299,501 61	.....	.....	269,544	29,469,380	6,150,655	79,155,858
Quebec	4,353,915	34,276,665	77,063	40,345,080	2,300,000	5,241,101	86,593,824	72,498,387	2,173,477 50	714,800	.....	1,469,004	8,694,622	3,217,011	86,593,824
New Brunswick	56,000	.....	171	379,500	54,000	1,320	490,991	436,991	13,109 73	.....	.....	.....	.....	54,000	490,991
Nova Scotia	40,000	.....	.....	702,000	54,000	.....	796,000	762,000	22,860 00	.....	.....	.....	.....	34,000	796,000
Manitoba	3,907,169	92,357,285	436,538	501,840	.....	670,556	97,873,388	12,800,150	383,949 30	66,069,260	2,606,300	749,275	95,524	15,552,879	97,873,388
Saskatchewan	.....	.....	400	4,376,270	100,000	1,287,056	5,763,726	5,763,726	174,424 98	.....	.....	.....	.....	.....	5,763,726
Alberta	4,687,170	42,270,630	165,580	7,838,620	50,000	854,600	55,866,600	13,612,510	407,472 30	34,973,030	1,025,500	.....	117,060	6,138,500	55,866,600
B. Columbia	410,011	1,846,378	17,235	14,242,914	150,000	1,096,433	17,762,971	9,346,773	280,403 19	640,514	.....	.....	6,175,851	1,599,833	17,762,971
Totals	Bondex 17,453,792	37,145 178,898,728	998,422	102,397,604	3,402,220	41,115,447	344,303,358	158,486,816	4,755,198 61	102,397,604	3,631,800	2,487,823	44,552,437	32,746,878	344,303,358

	1928	1929
Total duty collected ex-manufactory and ex-warehouse	$ 4,274,966 11	$ 4,755,294 70
License fees	2,100 00	1,650 00
	$ 4,277,066 11	$ 4,756,944 70

MALT LIQUOR

No. 12—COMPARATIVE STATEMENT of Manufactures for the Fiscal Years ended March 31, 1928 and 1929

Provinces	Licenses		Malt Used	Other Commodities Used	Malt Liquor Manufactured	Malt Liquor Exported	Total Duty Collected ex-Manufactory including License Fees
	No.	Fees					
1928		$	Lbs.	Lbs.	Gals.	Gals.	$ cts.
Ontario	37	2,200	37,018,235	633,259	14,947,123	585	30,649 90
Quebec	9	500	66,132,931	209,000	30,112,501	10,152	500 00
New Brunswick	2	100	777,782	.....	287,617	.....	100 00
Nova Scotia	2	100	537,500	.....	179,525	4,143	100 00
Manitoba	8	550	8,518,870	7,200	3,539,643	.....	2,200 75
Saskatchewan	5	225	3,997,129	.....	1,503,687	.....	225 00
Alberta	6	450	10,612,880	55,000	4,526,506	.....	450 00
British Columbia	15	900	8,531,833	34,794	3,301,311	10,029	3,421 50
Totals	**84**	**5,025**	**136,127,160**	**939,253**	**58,397,913**	**24,909**	**37,647 15**
1929							
Ontario	39	2,150	41,621,165	941,448	17,893,941	.....	26,960 30
Quebec	9	550	69,376,176	198,060	31,483,771	9,232	550 00
New Brunswick	2	100	436,269	.....	170,056	.....	100 00
Nova Scotia	2	150	727,700	.....	258,961	3,953	150 00
Manitoba	8	450	10,109,665	68,840	4,550,392	.....	16,975 65
Saskatchewan	8	450	5,655,775	91,600	2,393,991	.....	18,342 45
Alberta	6	350	12,693,345	146,400	5,410,195	.....	350 00
British Columbia	12	700	8,627,252	173,534	3,676,103	5,267	31,119 40
Totals	**86**	**4,900**	**149,247,347**	**1,619,822**	**65,837,410**	**18,452**	**94,547 80**

	1928 gals.	1929 gals.
Exported	21,029	14,573
Ship Stores	3,880	3,879
	24,909	18,452

MALT LIQUOR

No. 13—Comparative Statement of Warehouse Returns for the Fiscal Years ending March 31, 1928 and 1929

Provinces	Balance in Warehouse	Warehoused	Totals	Written off	Export	Entered for Consumption		Remaining in Warehouse	Totals
						Quantity	Duty Paid		
1928	Gals.	Gals.	Gals.	No.	Gals.	Gals.	$ cts.	Gals.	Gals.
Ontario	15,270	775,695	790,965	.....	.....	782,721	117,408 15	8,244	790,965
Quebec	19,474	471,150	490,624	.....	3,168	473,575	71,036 25	13,881	490,624
Alberta	.....	78,785	78,785	.....	.....	78,785	11,817 75	.....	78,785
British Columbia	31,031	.....	31,031	.....	10,029	8,905	1,335 75	12,097	31,031
Totals	**65,775**	**1,325,630**	**1,391,405**	.....	**13,197**	**1,343,986**	**201,597 90**	**34,222**	**1,391,405**
1929									
Ontario *	8,244	1,177,157	1,185,401	8,244	.....	1,091,417	163,712 55	85,740	1,185,401
Quebec	13,881	414,066	427,947	.....	3,661	403,250	60,487 50	21,036	427,947
Alberta	.....	210,849	210,849	.....	.....	210,849	31,627 35	.....	210,849
British Columbia	12,097	10,372	22,469	.....	5,267	7,099	1,064 85	10,103	22,469
Totals	**34,222**	**1,812,444**	**1,846,666**	**8,244**	**8,928**	**1,712,615**	**256,892 25**	**116,879**	**1,846,666**

	1928	1929
Total duty accrued ex-manufactory and ex-warehouse	$ 234,220 05	$ 346,540 05
License fees	5,025 00	4,900 00
	$ 239,245 05	$ 351,440 05

TOBACCO

No. 14—Comparative Statement of Manufactures

Provinces	Licenses		Total Weight of Raw Leaf Tobacco and other materials actually used	Tobacco		
	No.	Fees		Produced	Paid Duty	Warehoused
1928		$ cts.	Lbs.	Lbs.	Lbs.	Lbs.
Ontario	10	500 00	2,002,085	977,205	794,590	182,615
Quebec	41	2,000 00	27,674,852	19,991,847	18,442,296	1,549,551
Prince Edward Island	3	150 00	177,994	190,072	190,072	.....
Manitoba	2	75 00	12,186	11,725	11,725	.....
British Columbia	2	100 00	17,159	17,684	17,684	.....
Totals	**58**	**2,825 00**	**29,884,276**	**21,188,533**	**19,456,367**	**1,732,166**
1929						
Ontario	8	400 00	2,098,260	839,284	759,844	79,440
Quebec	43	2,125 00	29,599,482	20,009,169	18,886,292	1,122,877
Prince Edward Island	2	100 00	167,225	180,498	180,498	.....
Manitoba	2	100 00	9,013	8,262	8,262	.....
British Columbia	2	100 00	17,977	18,577	18,577	.....
Totals	**57**	**2,825 00**	**31,891,957**	**21,055,790**	**19,853,473**	**1,202,317**

TOBACCO

for the Fiscal Years ending March 31, 1928 and 1929

Cigarettes			Cigarettes, Overweight			Snuff			Total Duty Collected ex-Manufactory (including License Fees)
Produced	Paid Duty	Warehoused	Produced	Paid Duty	Warehoused	Produced	Paid Duty	Warehoused	
No.	No.	No.	No.	No.	No.	Lbs.	Lbs.	Lbs.	$ cts.
447,481,320	446,005,470	1,475,850	50,350	50,350	.....	.....	.....	.....	2,836,004 65
3,557,506,855	3,312,787,105	244,719,750	1,459,550	1,341,550	118,000	945,132	945,105	27	23,770,959 91
.....	.....	.....	.....	.....	.....	.....	.....	.....	38,164 40
.....	.....	.....	.....	.....	.....	525	525	.....	2,525 00
.....	.....	.....	.....	.....	.....	.....	.....	.....	3,636 80
4,004,988,175	**3,758,792,575**	**246,195,600**	**1,509,900**	**1,391,900**	**118,000**	**945,657**	**945,630**	**27**	**26,651,290 76**
535,638,660	535,070,410	568,250	49,850	49,850	.....	151	151	.....	3,363,369 71
4,127,620,315	3,321,062,425	806,557,890	1,383,810	1,305,310	78,500	993,318	993,318	.....	23,918,780 03
.....	.....	.....	.....	.....	.....	.....	.....	.....	36,199 60
.....	.....	.....	.....	.....	.....	490	490	.....	1,850 40
.....	.....	.....	.....	.....	.....	.....	.....	.....	3,815 46
4,663,258,975	**3,856,132,835**	**807,126,140**	**1,433,660**	**1,355,160**	**78,500**	**993,959**	**993,959**	.....	**27,324,015 14**

TOBACCO—MANUFACTURED BEFORE JUNE 1, 1908

No. 15—COMPARATIVE STATEMENT of Warehouse Returns for the Fiscal Years ended March 31, 1928 and 1929

DR. CR.

Remaining in warehouse from last year	Totals	Provinces	Remaining in warehouse	Totals
Lbs.	Lbs.	1928	Lbs.	Lbs.
461	461	New Brunswick	461	461
19,719½	19,719½	Sundries	19,719½	19,719½
20,180½	**20,180½**	**Totals**	**20,180½**	**20,180½**
		1929		
461	461	New Brunswick	461	461
19,719½	19,719½	Sundries	19,719½	19,719½
20,180½	**20,180½**	**Totals**	**20,180½**	**20,180½**

DR. No. 16—WAREHOUSE RETURN for the Fiscal Year ended March 31, 1929 DR.

Ports	Remaining in Warehouse from last year		Warehoused			Received from other Ports					Totals		
						Tobacco		Cigarettes		Overweight cigarettes			
	Tobacco	Cigarettes	Tobacco	Cigarettes	Overweight cigarettes	Removed during year	In transit last year	Removed during year	In transit last year	Removed during year	Tobacco	Cigarettes	Overweight cigarettes
	Lbs.	No.	Lbs.	No.	No.	Lbs.	Lbs.	No.	No.	No.	Lbs.	No.	No.
Hamilton, Ont.	6,681		79,440½	568,250							86,121½	568,250	
Ottawa, Ont.						49	9	196,450		400	58	196,450	400
Ontario	6,681		79,440½	568,250		49	9	196,450		400	86,179½	764,700	400
Granby, Que.			6,622			90					6,712		
Montreal, Que.	51,745	76,174,150	1,005,524½	805,885,590	78,500	425		511,150	48,000		1,147,644½	882,618,890	78,500
	8,000	503,600	20,730	672,300							28,730	1,175,900	
Quebec	59,745	76,677,750	1,122,876½	806,557,890	78,500	515		511,150	48,000		1,183,136½	883,794,790	78,500
St. John, N.B.	25	57,500						510,000			25	567,500	
Halifax, N.S.		134,000				150		2,120,000	150,000		150	2,404,000	
Vancouver, B.C.	162	585,950				4,136		4,757,000	250,000		4,298	5,592,950	
Victoria, B.C.								80,000				80,000	
B. Columbia	162	585,950				4,136		4,837,000	250,000		4,298	5,672,950	
Totals	**66,613**	**77,455,200**	**1,202,317**	**807,126,140**	**78,500**	**4,850**	**9**	**8,174,600**	**448,000**	**400**	**1,273,789**	**893,203,940**	**78,900**

CR. No. 16—WAREHOUSE RETURN for the Fiscal Year ended March 31, 1929—*Continued* CR.

Ports	Entered for Consumption				Removed to other Ports				Exported	
					Tobacco	Cigarettes		Over-weight cigarettes		
	Tobacco	Cigarettes	Over-weight cigarettes	Duty	Warehoused in Ports to which removed	Warehoused in Ports to which removed	In transit	Warehoused in Ports to which removed	Tobacco	Cigarettes
	Lbs.	No.	No.	$ cts.	Lbs.	No.	No.	No.	Lbs.	No.
Hamilton, Ont.	6,924½	4,200	.....	1,410 10	4,136	477,000	50,000	.....	72,910	9,800
Ottawa, Ont.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ontario	6,924½	4,200	.....	1,410 10	4,136	477,000	50,000	.....	72,910	9,800
Granby, Que.	.....	.....	.....	.....	310	.....	.....	.....	6,287	.....
Montreal, Que.	1,103,845	749,607,830	78,100	4,719,275 08	289	7,498,450	385,000	400	14,810½	837,620
	14,960	322,300	.....	4,925 80	.....	.....	.....	.....	2,530	.....
Quebec	1,118,805	749,930,130	78,100	4,724,200 88	599	7,498,450	385,000	400	23,627½	837,620
St. John, N.B.	.....	.....	.....	.....	25	.....	.....	.....	.....	.....
Halifax, N.S.	.....	.....	.....	.....	.....	40,000	.....	.....	.....	.....
Vancouver, B.C.	.....	.....	.....	.....	90	159,150	.....	.....	.....	.....
Victoria, B.C.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
British Columbia	.....	.....	.....	.....	90	159,150	.....	.....	.....	.....
Totals	**1,125,729½**	**749,934,330**	**78,100**	**4,725,610 98**	**4,850**	**8,174,600**	**435,000**	**400**	**96,537½**	**847,420**

CR. No. 16—WAREHOUSE RETURN for the Fiscal Year ended March 31, 1929—*Concluded* CR.

Ports	Ship's Stores		Written off			Taken for Re-working		Remaining in Warehouse		Totals		
	Tobacco	Cigarettes	Overweight cigarettes	Tobacco	Cigarettes	Tobacco	Cigarettes	Tobacco	Cigarettes	Tobacco	Cigarettes	Overweight cigarettes
	Lbs.	No.	No.	Lbs.	No.	Lbs.	No.	Lbs.	No.	Lbs.	No.	No.
Hamilton, Ont.	18	27,250				492½		1,640½		86,121½	568,250	
Ottawa, Ont.			400	58	196,450					58	196,450	400
Ontario	18	27,250	400	58	196,450	492½		1,640½		86,179½	764,700	400
Granby, Que.	25					00				6,712		
Montreal, Que.	875	7,070,400				6,905	6,150	20,970	117,213,440	1,147,634½	882,618,890	78,500
								11,240	853,600	28,730	1,175,900	
Quebec	900	7,070,400				6,995	6,150	32,210	118,067,040	1,183,136½	883,794,790	78,500
St. John, N.B.		562,500							5,000	25	567,500	
Halifax, N.S.	60	1,969,000						90	395,000	150	2,404,000	
Vancouver, B.C.		4,690,260				3,576		632	1,343,540	4,298	5,592,950	
Victoria, B.C.		80,000									80,000	
British Columbia		4,170,260				3,576		632	1,343,540	4,298	5,672,950	
Totals	**978**	**13,799,410**	**400**	**58**	**196,450**	**11,063½**	**6,150**	**34,572½**	**119,810,580**	**1,273,789**	**893,203,940**	**78,900**

TOBACCO

DR. No. 17—COMPARATIVE STATEMENT of Warehouse Returns for

Provinces	Remaining in Warehouse from last Year		Warehoused			
	Tobacco	Cigarettes	Tobacco	Cigarettes	Over weight Cigarettes	Snuff
1928	Lbs.	No.	Lbs.	No.	No.	Lbs.
Ontario	10,937½	.....	182,615	1,475,850	.....	.....
Quebec	39,178	8,742,000	1,549,551	244,837,750	.....	27
New Brunswick	.....	197,500	.....	.....	.....	.....
Nova Scotia	9,729	244,000	.....	.....	.....	.....
British Columbia	.....	316,650	.....	.....	.....	.....
Totals	**59,844½**	**9,500,150**	**1,732,166**	**246,313,600**	.....	**27**
1929						
Ontario	6,681	.....	79,440½	568,250	.....	.....
Quebec	59,745	76,677,750	1,122,876½	806,557,890	78,500	.....
New Brunswick	25	57,500	.....	.....	.....	.....
Nova Scotia	.....	134,000	.....	.....	.....	.....
British Columbia	162	585,950	.....	.....	.....	.....
Totals	**66,613**	**77,455,200**	**1,202,317**	**807,126,140**	**78,500**	.....

TOBACCO

the Fiscal Years ended March 31, 1928 and 1929 CR.

Received from other Ports					Totals			
Tobacco		Cigarettes		Overweight cigarettes	Tobacco	Cigarettes	Overweight Cigarettes	Snuff
Removed during year	In transit last year	Removed during year	In transit last year	Removed during year				
Lbs.	Lbs.	No.	No.	No.	Lbs.	No.	No.	Lbs.
16		125,500			193,568½	1,601,350		
		371,450			1,588,729	253,951,200		27
25		440,000			25	637,500		
		1,255,600			9,729	1,499,600		
604		1,537,000	10,000		604	1,863,650		
645		**3,729,550**	**10,000**		**1,792,655½**	**259,553,390**		**27**
49	9	196,450		400	86,179½	764,700	400	
515		511,150	48,000		1,183,136½	883,794,790	78,500	
		510,000			25	567,500		
150		2,120,000	150,000		150	2,404,000		
4,136		4,837,000	250,000		4,298	5,672,950		
4,850	**9**	**8,174,600**	**448,000**	**400**	**1,273,789**	**893,203,940**	**78,900**	

TOBACCO

DR. No. 17—COMPARATIVE STATEMENT of Warehouse Returns for the Fiscal Years ended March 31, 1928 and 1929 CR.
—*Continued*

Provinces	Entered for Consumption				Removed to Other Ports					Exported	
					Tobacco		Cigarettes		Overweight cigarettes		
	Tobacco	Cigarettes	Overweight Cigarettes	Duty	Warehoused in ports to which removed	In transit	Warehoused in ports to which removed	In transit	Warehoused in ports to which removed	Tobacco	Cigarettes
1928	Lbs.	No.	No.	$ cts.	Lbs.	Lbs.	No.	No.	No.	Lbs.	No.
Ontario	13,243			2,648 60	504		1,016,850			172,324	459,000
Quebec	1,492,507	166,837,850		1,300,076 04	141	9	2,505,600	400,000		28,140	2,477,500
New Brunswick							147,500				
Nova Scotia							40,000	48,000			
British Columbia							19,600				
Totals	**1,505,750½**	**166,837,850**		**1,302,724 64**	**645**	**9**	**3,729,550**	**448,000**		**200,464**	**2,936,500**
1929											
Ontario	6,924½	4,200		1,410 10	4,136		477,000	50,000		72,910	9,800
Quebec	1,118,805	749,930,130	78,100	4,724,200 88	599		7,498,450	385,000	400	23,627½	837,620
New Brunswick					25						
Nova Scotia							40,000				
British Columbia					90		159,150				
Totals	**1,125,729½**	**749,934,330**	**78,100**	**4,725,610 98**	**4,850**		**8,174,600**	**435,000**	**400**	**96,537½**	**847,420**

DR. No. 17—COMPARATIVE STATEMENT of Warehouse Returns for the Fiscal Years ended March 31, 1928 and 1929 CR.
—*Concluded*

Provinces	Ship's Stores			Written off			Taken for Reworking		Remaining in Warehouse		Totals			
	Tobacco	Cigarettes	Snuff	Overweight Cigarettes	Tobacco	Cigarettes	Tobacco	Cigarettes	Tobacco	Cigarettes	Tobacco	Cigarettes	Overweight Cigarettes	Snuff
1928	Lbs.	No.	Lbs.	No.	Lbs.	No.	Lbs.	No.	Lbs.	No.	Lbs.	No.	No.	Lbs.
Ontario					16	125,500	800½		6,681		193,568½	1,661,350		
Quebec	691	5,032,900	27				7,496	19,600	59,745	76,677,750	1,588,729	253,951,200		27
New Brunswick		432,500							25	57,500	25	637,500		
Nova Scotia		1,277,600			9,729					134,000	9,729	1,499,600		
British Columbia	10	1,258,100					432		162	585,950	604	1,863,650		
Totals	**701**	**8,001,100**	**27**		**9,745**	**125,500**	**8,728½**	**19,600**	**66,613**	**77,455,200**	**1,792,655½**	**259,553,300**		**27**
1929														
Ontario	18	27,250		400	58	196,450	492½		1,640½		86,179½	764,700	400	
Quebec	900	7,070,400					6,995	6,150	32,210	118,067,040	1,183,136½	883,794,790	78,500	
New Brunswick		562,500								5,000	25	567,500		
Nova Scotia	60	1,969,000							90	395,000	150	2,404,000		
British Columbia		4,170,260					3,576		632	1,343,540	4,298	5,672,950		
Totals	**978**	**13,799,410**		**406**	**58**	**196,450**	**11,063½**	**6,150**	**34,572½**	**119,819,580**	**1,273,789**	**893,203,940**	**78,900**	

RAW LEAF TOBACCO, INCLUDING

DR. — No. 18—COMPARATIVE STATEMENT of Warehouse

Remaining in warehouse from last year	Imported	Warehoused ex factory	Received from other Ports		Totals	Provinces
			Removed during year	In transit last year		
std. lbs.	std. lbs.	std. lbs.	std. lbs.	std. lbs.	std. lbs.	1928
2,580,932½	2,023,137	7	10,257	.....	4,614,333½	Ontario
8,721,459¾	15,622,991	10	484,677	7,527½	24,836,665¼	Quebec
415	1,034	.....	415	.....	1,864	New Brunswick
23,826	1,687	.....	.....	.....	25,513	Nova Scotia
5,477	.....	.....	.....	.....	5,477	Prince Edward Island
7,611	12,410	.....	2,203	.....	22,224	Manitoba
.....	21	.....	.....	.....	21	Saskatchewan
377	463	.....	218	.....	1,058	Alberta
6,244	21,170	.....	376	.....	27,790	British Columbia
11,346,342¼	**17,682,913**	**17**	**498,146**	**7,527½**	**29,534,945¾**	**Totals**
						1929
2,488,507	1,823,720	927	1,476	277	4,314,908	Ontario
9,936,878	15,740,746½	.....	525,011	2	26,202,636½	Quebec
419	262	.....	.....	.....	681	New Brunswick
1,165	1,196	.....	.....	.....	2,361	Nova Scotia
5,477	.....	.....	.....	.....	5,477	Prince Edward Island
10,661	5,038	.....	.....	.....	15,759	Manitoba
273	514½	.....	.....	.....	787½	Alberta
4,937	22,103	.....	111	.....	27,151	British Columbia
12,448,317	**17,593,640**	**927**	**526,598**	**279**	**30,569,761**	**Totals**

STEMS, SCRAPS AND CUTTINGS

Returns for the Fiscal Years ended March 31, 1927 and 1928 CR.

Entered for Consumption		Removed to other Ports		Exported	Destroyed	Remaining in warehouse	Totals
Quantity	Duty	Warehoused in Ports to which removed	In Transit				
std. lbs.	$ cts.	std. lbs.	std. lbs.	std. lbs.	std. lbs.	std. lbs.	std. lbs.
1,963,700	827,483 20	154,952	277	4,327	2,570½	2,488,507	4,614,333½
14,538,218	5,898,822 15	342,976	2	11,346	7,245¼	9,936,878	24,836,665¼
1,445	586 00	.....	.....	.....	.....	419	1,864
1,177	473 60	.....	.....	.....	23,171	1,165	25,513
.....	.....	.....	.....	.....	.....	5,477	5,477
11,563	4,868 60	.....	.....	.....	.....	10,661	22,224
21	8 40	.....	.....	.....	.....	.....	21
567	318 40	218	.....	.....	.....	273	1,058
22,787	11,052 60	.....	.....	.....	66	4,937	27,790
16,539,478	**6,743,612 95**	**498,146**	**279**	**15,673**	**33,052¾**	**12,448,317**	**29,534,945¾**
2,008,759½	853,756 90	2,629	.....	147,096	1,163	2,155,261	4,314,908½
15,792,752¾	6,388,344 20	523,969	.....	115,272	10,235¼	9,760,408	26,202,636¾
569	248 80	.....	.....	.....	.....	112	681
1,260	504 00	.....	.....	.....	.....	1,101	2,361
601	240 40	.....	.....	.....	4,876	.....	5,477
7,689¼	2,977 30	.....	.....	.....	.....	8,070	15,759¼
594½	238 80	.....	.....	.....	.....	193	787½
22,700	11,204 60	.....	.....	.....	.....	4,451	27,151
17,834,925½	**7,257,515 00**	**526,598**	.....	**262,368**	**16,274¼**	**11,929,596**	**30,569,761¾**

CIGARS

No. 19—Comparative Statement of Manufactures for the Fiscal Years ended March 31, 1928 and 1929

Provinces	Licenses		Total Raw Leaf Tobacco and other materials actually used	Deficiencies Paying Duty	Cigars at $3.00 per Thousand			Total Duty collected ex-manufactory, including License Fees
	No.	Fees		Cigars	Manufactured	Paid duty	Warehoused	
1928		$	Lbs.	No.	No.	No.	No.	$ cts.
Ontario	32	1,600	838,992	45,569	40,467,750	39,178,975	1,288,775	119,276 19
Quebec	43	2,150	2,545,755	14,267	137,419,974	45,787,939	91,632,035	139,556 83
New Brunswick	1	50	4,341	.....	254,190	219,940	34,250	709 82
Nova Scotia	1	50	3,290	.....	200,975	79,550	121,425	288 65
Manitoba	2	100	3,586	.....	189,580	189,580	.....	668 74
Saskatchewan	1	50	63	364	3,150	3,150	.....	60 54
Alberta	1	50	1,682	.....	89,250	89,250	.....	317 75
British Columbia	9	450	48,879	6,734	2,199,550	2,195,550	4,000	7,056 83
Totals	**90**	**4,500**	**3,446,588**	**66,934**	**180,824,419**	**87,743,934**	**93,080,485**	**267,935 35**
1929								
Ontario	31	1,650	859,343½	37,022	41,157,279	39,846,835	1,310,444	121,303 25
Quebec	39	1,950	2,732,650¾	5,839	150,954,460	50,891,582	100,062,878	154,642 48
New Brunswick	1	50	2,167	.....	125,990	114,040	11,950	392 12
Nova Scotia	1	50	4,028	.....	235,575	143,750	91,825	481 25
Alberta	1	50	2,083½	.....	107,900	107,900	.....	373 70
British Columbia	9	450	46,791	42,458	2,015,625	2,015,625	.....	6,624 17
Totals	**82**	**4,200**	**3,647,063¾**	**85,319**	**194,596,829**	**93,119,732**	**101,477,097**	**283,816 97**

CIGARS

DR. No. 20—COMPARATIVE STATEMENT of Warehouse Returns for the Fiscal Years ended March 31, 1928 and 1929 CR.

Remaining in Warehouse from last year	Warehoused	Received from other Ports: Removed during the year	Received from other Ports: In Transit last year	Totals	Provinces	Entered for Consumption: Quantity	Entered for Consumption: Duty	Removed to other Ports: Warehoused in Ports to which removed	Removed to other Ports: In Transit	Exported	Free	Remaining in Warehouse	Totals
No.	No.	No.	No.	No.	1928	No.	$ cts.	No.	No.	No.	No.	No.	No.
1,041,500	1,288,775	3,750	.....	2,334,025	Ontario	1,461,500	4,384 50	.....	.....	.....	3,750	868,775	2,334,025
13,543,255	91,632,035	7,207,350	528,700	112,911,340	Quebec	92,368,830	277,106 61	7,217,600	221,250	101,015	.....	13,002,645	112,911,340
.....	34,250	.....	.....	34,250	New Brunswick	31,600	94 80	.....	.....	.....	.....	2,650	34,250
23,800	121,425	.....	.....	145,225	Nova Scotia	124,750	374 25	.....	.....	.....	.....	20,475	145,225
1,300	4,000	6,500	.....	11,800	British Columbia	.....	.....	.....	.....	6,450	.....	5,350	11,800
14,609,855	**93,080,485**	**7,217,600**	**528,700**	**115,436,640**	**Totals**	**93,986,680**	**281,960 16**	**7,217,600**	**221,250**	**107,465**	**3,750**	**13,899,895**	**115,436,640**
					1929								
868,775	1,310,444	3,500	.....	2,182,719	Ontario	1,451,225	4,353 68	.....	.....	1,000	3,500	726,994	2,182,719
13,002,645	100,062,878	6,906,850	220,250	120,192,623	Quebec	96,243,140	288,467,01	6,917,800	337,100	119,600	.....	16,574,983	120,192,623
2,650	11,950	.....	.....	14,600	New Brunswick	8,450	25 35	.....	.....	.....	.....	6,150	14,600
20,475	91,825	.....	.....	112,300	Nova Scotia	73,300	219 91	.....	.....	.....	.....	39,000	112,300
5,350	.....	8,000	1,000	14,350	British Columbia	.....	.....	550	.....	5,150	.....	8,650	14,350
13,899,895	**101,477,097**	**6,918,350**	**221,250**	**122,516,592**	**Totals**	**97,776,115**	**293,065 95**	**6,918,350**	**337,100**	**125,750**	**3,500**	**17,355,777**	**122,516,592**

	1928	1929
Total duty accrued ex-manufactory and ex-warehouse	$ 545,395 51	$ 572,682 92
License fees	4,500 00	4,200 00
	$ 549,895 51	$ 576,882 92

INSPECTION OF PETROLEUM

No. 21—COMPARATIVE STATEMENT of Inspected Petroleum and Naphtha shipped from Refineries during the Fiscal Years ended March 31, 1928 and 1929

Provinces	Licenses		Petroleum	Naphtha	Totals
	No.	Fees			
1928		$	Gals.	Gals.	Gals.
Ontario	5	5	37,305,789·88	110,415,372·15	147,721,162·03
Quebec	2	2	4,965,797·00	62,675,955·00	67,641,752·00
Nova Scotia	1	1	12,019,448·00	39,733,468·00	51,752,916·00
Manitoba	1	1	25,200·00	69,472·00	94,672·00
Saskatchewan	1	1	8,212,213·00	30,151,001·00	38,363,214·00
Alberta	9	9	12,272,986·00	43,209,967·00	55,482,953·00
British Columbia	3	3	5,278,321·50	33,387,350·50	38,665·672·00
Totals	**22**	**22**	**80,079,755·38**	**319,642,585·65**	**399,722,341·03**
1929					
Ontario	5	5	30,830,414·65	129,782,275·80	160,612,690·45
Quebec	2	2	6,519,733·00	91,561,910·00	98,081·643·00
Nova Scotia	1	1	14,189,818·00	57,891,905·00	72,081,723·00
Manitoba	1	1	338,002·00	760,876·00	1,038,878·00
Saskatchewan	1	1	8,593,777·00	42,203,323·00	50,797,100·00
Alberta	8	8	7,586,730·00	55,968,556·00	63,555,286·00
British Columbia	3	3	6,693,893·00	45,585,961·50	52,279,854·50
Totals	**21**	**21**	**74,752,367·65**	**423,754,807·30**	**498,507,174·95**

No. 22—STATEMENT showing the number of parties under Licenses for the year 1928-29

Ports	Distillers	Manufacturers in Bond	Bonding Warehouses	Cigar Manufacturers	Tobacco Manufacturers	Brewers and Maltsters	Chemical Stills	Wood Alcohol Mfrs.	Petroleum Refiners	Manufacturers of Stills	Importers of Stills	Malt Vinegar Brewers	Can. leaf. stemmers	Acetic Acid	Compounders
Amherstburg	....	1	....	....	1	....	....	....	....	....	....	....	4	....	....
Belleville	2	....	....	....	....	1	....	....	....	....	....	....	....	....	1
Brantford	....	2	....	....	....	1	2	....	....	....	....	....	....	....	....
Bridgeburg	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....
Chatham	....	1	....	....	....	....	....	....	....	....	....	....	2	....	....
Cobourg	....	2	....	....	....	....	1	....	....	....	....	....	....	....	....
Collingwood	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....
Cornwall	....	1	....	....	....	....	2	....	....	....	....	....	....	....	....
Fort Frances	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....
Fort William	....	1	....	....	....	1	....	....	....	....	....	....	....	....	....
Galt	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....
Guelph	....	1	....	....	....	4	1	....	....	....	....	....	....	....	....
Hamilton	....	6	1	4	2	2	5	....	....	1	4	....	....	1	....
Kenora	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....
Kingston	....	2	....	....	....	1	1	....	....	....	....	....	....	....	....
Kitchener	1	2	....	1	....	2	3	....	....	....	....	....	....	....	....
Lindsay	1	1	....	....	....	....	....	2	....	....	....	....	....	....	....
London	....	7	1	10	1	2	7	....	....	....	....	....	....	....	....
Niagara Falls	....	1	....	1	....	....	....	....	....	....	....	....	....	....	....
North Bay	....	....	....	....	....	1	1	....	....	....	....	....	....	....	....
Orillia	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....
Oshawa	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....
Ottawa	....	5	1	....	....	2	6	....	....	....	1	....	....	....	....
Owen Sound	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....
Peterborough	....	1	....	....	....	1	....	....	....	....	....	....	....	....	....
Port Arthur	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....
Port Hope	....	1	....	....	....	....	1	....	....	....	....	....	....	....	....
Prescott	1	1	....	....	....	....	....	....	....	....	....	....	....	....	....
Sarnia	1	....	....	....	....	1	1	....	2	....	....	....	....	....	....
Sault Ste. Marie	....	....	....	1	....	1	....	....	....	....	....	....	....	....	....
Simcoe	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....
Stratford	....	....	....	....	....	1	2	....	....	....	....	....	....	....	....
Sudbury	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....
St. Catharines	....	....	....	2	....	1	....	....	....	....	....	....	....	....	....
St. Thomas	....	1	....	2	....	....	1	....	....	....	....	....	1	....	....
Toronto	1	105	14	8	3	8	33	....	3	1	7	2	....	....	1
Wallaceburg	....	....	....	....	1	....	....	....	....	....	....	....	1	....	....
Welland	1	....	....	1	....	1	....	....	....	....	....	....	....	....	....
Windsor	1	15	....	1	....	6	7	....	....	....	....	....	....	....	1
Woodstock	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....
Ontario	9	158	17	32	8	42	78	3	5	2	12	2	8	1	3
Chicoutimi	....	3	....	1	....	....	....	....	....	....	....	....	....	....	....
Drummondville	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....
Granby	....	....	5	3	1	....	....	....	....	....	....	....	....	....	....
Hull	....	....	....	....	....	....	1	1	....	....	....	....	....	....	....
Montreal	7	85	11	30	34	6	21	2	2	2	5	....	1	1	1
Quebec	....	13	1	1	4	2	3	....	....	....	....	....	....	....	....
Shawinigan Falls	....	1	....	....	1	....	1	....	....	....	....	....	....	1	....
Sherbrooke	....	4	....	2	....	1	1	....	....	....	....	....	....	....	....
Sorel	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....
St. Hyacinthe	1	....	....	1	....	....	....	....	....	....	....	....	1	....	....
St. John's	....	....	....	1	1	....	....	....	....	....	....	....	....	....	....
Sutton	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....
Three Rivers	....	2	....	....	2	....	....	....	....	....	1	....	....	....	....
Valleyfield	....	2	....	....	....	1	....	....	....	....	....	....	....	....	....
Quebec	9	111	17	39	43	10	28	3	2	2	6	....	2	2	1

No. 22—STATEMENT showing the number of parties under Licenses for the year 1928-29—*Concluded*

Ports	Distillers	Manufacturers in Bond	Bonding Warehouses	Cigar Manufacturers	Tobacco Manufacturers	Brewers and Maltsters	Chemical Stills	Wood Alcohol Mfrs.	Petroleum Refiners	Manufacturers of Stills	Importers of Stills	Malt Vinegar Brewers	Can. leaf. stemmers	Acetic Acid	Compounders
Fredericton			1												
St. John	1	8	1	1		2	1								
St. Stephen		2													
Woodstock		3													
New Brunswick	1	13	2	1		2	1								
Amherst							1								
Halifax		3	2			2	1		1						
Yarmouth		1		1											
Nova Scotia		4	2	1		2	2		1						
Charlottetown, P.E.I.		1			2										
Brandon						2	1								
Winnipeg	2	25	4		2	8	8		1	1		1			
Manitoba	2	25	4		2	10	9		1	1		1			
Moose Jaw						1	2								
North Portal						1									
Regina		1	2			2	3		1						
Saskatoon						3	2								
Prince Albert						1									
Saskatchewan		1	2			8	7		1						
Calgary		2	1	1		3	6		4			1			
Edmonton		4	1			2	6		1						
Lethbridge						1	2		3						
Medicine Hat						1									
Alberta		6	2	1		7	14		8			1			
Cranbrook						1									
Fernie						1									
Nanaimo				2											
Nelson						1									
New Westminster	1			2		1									
Penticton						1									
Revelstoke						1									
Rossland						1									
Vancouver	3	10	3	4	2	5	4		3	1					
Victoria		1	1	1		2	1								
British Columbia	4	11	4	9	2	14	5		3	1					
Dawson, Y.T.			1												
Grand Total	**25**	**330**	**51**	**83**	**57**	**95**	**144**	**6**	**21**	**6**	**18**	**4**	**10**	**3**	**4**

EXCISE TAXES

90040—7

STATEMENT showing Excise Taxes (Domestic and Impor

	Ports	Licenses	Stamps	Automobiles	Matches	Sales	Playing Cards	Cigars
		$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
	NOVA SCOTIA—							
1	Amherst	82 00	3,334 72			34,494 84		
2	Annapolis Royal	22 00	1,936 60			7,382 54		
3	Antigonish	4 00	968 48			321 60		
4	Arichat		239 32					
5	Baddeck	20 00	352 98			113 24		
6	Barrington Passage	22 00	264 06			287 74		
7	Bridgewater	30 00	1,281 60			4,699 45		
8	Canso	6 00	750 62			636 37		
9	Digby	8 00	970 66			888 84		
10	Glace Bay	14 00	1,028 88			5,477 17		
11	Halifax	386 00	29,114 33	527 21		169,575 94		
12	Kentville	48 00	4,044 34	156 16		6,887 36		
13	Liverpool	46 00	1,538 16			4,877 32		
14	Lockeport		148 38					
15	Lunenburg	56 00	1,363 36	205 59		6,165 01		
16	Middleton	10 00	1,142 30			1,458 37		
17	New Glasgow	76 00	3,454 18			141,495 44		
18	North Sydney	18 00	1,842 12			5,425 68		
19	Parrsboro	22 00	662 66			33 55		
20	Pictou	42 00	1,258 62			7,773 38		
21	Port Hawkesbury	2 00	272 84			382 95		
22	Port Hood	18 00	452 81			86 08		
23	Shelburne	6 00	205 64			1,484 27		
24	Sydney	36 00	7,197 48			247,052 06		
25	Truro	22 00	4,172 80			60,652 30		
26	Weymouth	36 00	269 44			1,507 78		
27	Windsor	48 00	1,954 48			15,602 34		
28	Yarmouth	54 00	2,872 86			8,284 84		138 29
		1,134 00	73,094 72	888 96		733,046 46		138 29
	PRINCE EDWARD ISLAND—							
29	Charlottetown	192 00	6,916 42			18,236 88		
30	Summerside	90 00	2,995 40			2,930 61		
		282 00	9,911 82			21,167 49		
	NEW BRUNSWICK—							
31	Bathurst	90 00	1,562 36			15,087 13		
32	Campbellton	52 00	2,940 24	117 33		16,086 94		
33	Chatham	90 00	1,294 50			14,701 31		
34	Fredericton	113 00	4,879 85			35,023 31		
35	McAdam Junction	6 00	215 42			61 83		
36	Moncton	118 00	7,675 32	241 54		72,542 68		
37	Newcastle	30 00	1,167 14			14,362 78		
38	Sackville	4 00	1,263 22			30,583 74		
39	St. Andrews	22 00	469 98			278 58		
40	St. John	370 00	26,363 36			247,186 69		105 64
41	St. Stephen	26 00	1,393 90			36,915 23		
42	Woodstock	108 00	6,644 04			13,519 22		
		1,029 00	55,869 33	358 87		496,349 44		105 64
	QUEBEC—							
43	Athelstan	36 00	1,923 55			1,321 43		
44	Beebe Junction	110 00	2,969 38			71,466 84		
45	Chicoutimi	154 00	11,419 58	65 15		33,489 19		6 30
46	Coaticook	34 00	1,684 46			5,607 11		
47	Drummondville	34 00	2,063 06	117 00		27,535 98		
48	Gaspe	4 00	665 36			880 07		
49	Granby	144 00	2,865 60			73,269 16		1,054 21
50	Hull	436 00	9,417 94		531,314 26	109,025 35		
51	Lake Megantic	28 00	1,222 40			2,667 48		
52	Montreal	6,702 00	1,126,038 66	1,180 89	97,818 21	13,002,816 32	112,752 00	177,948 90
53	Paspebiac	23 00	1,105 02			329 56		
54	Perce		619 41			254 93		
55	Quebec	1,133 00	64,471 79	2,160 22		715,356 77		2,485 22
56	Rimouski	118 00	5,064 45			12,214 79		
57	Shawinigan Falls	124 00	5,785 45	160 00		45,130 55		
58	Sherbrooke	852 00	26,816 77	55 25		366,387 62		135 72
59	Sorel	98 00	3,234 54			29,866 45		
60	Sutton	44 00	1,782 28			5,204 53		
61	St. Armand		13 50					
62	St. Hyacinthe	240 00	5,634 84			88,363 14		
63	St. Johns	238 00	7,554 48			146,580 89		
64	Three Rivers	162 00	13,925 72			84,497 36		
65	Valleyfield	64 00	3,633 28			43,946 66		
		10,783 00	1,299,911 52	3,738 51	629,132 47	14,866,212 18	112,752 00	181,630 35

tations) collected during the fiscal year 1928-29

Wines	Ale, Beer, etc.	Transportation	Embossed cheques	Penalties and Interest	Domestic Total	Importations		Grand Total	
						Sales	Excise		
$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	
.....	.....	.....	.....	129 85	38,041 41	4,910 51	2,507 34	45,459 26	1
.....	.....	1 40	.....	111 74	9,454 28	1,204 29	370 05	11,028 62	2
.....	.....	.....	.....	0 71	1,294 79	1,339 74	138 73	2,773 26	3
.....	.....	.....	.....	.....	239 32	72 40	.....	311 72	4
.....	.....	.....	.....	.....	486 22	274 67	.....	760 89	5
.....	.....	.....	.....	0 02	573 82	121 24	30 00	725 06	6
.....	.....	.....	.....	58 58	6,069 63	1,068 80	368 37	7,506 80	7
.....	.....	.....	.....	.....	1,392 99	2,830 66	22 90	4,246 55	8
.....	.....	.....	.....	0 13	1,867 63	3,212 13	395 19	5,474 95	9
.....	.....	77 90	11 88	.....	6,609 83	6,928 70	869 33	14,407 86	10
.....	27,112 88	4,649 08	51 22	457 03	231,873 69	193,543 15	37,574 81	462,991 65	11
.....	.....	9,707 85	156 72	2 00	21,002 43	2,388 77	412 72	23,803 92	12
.....	.....	.....	.....	3 42	6,464 90	6,973 36	576 75	14,015 01	13
.....	.....	.....	.....	.....	148 38	127 34	40 17	315 89	14
.....	.....	3 50	.....	5 24	7,795 20	1,802 41	500 15	10,097 76	15
.....	.....	.....	.....	.....	2,614 17	255 99	69 00	2,939 16	16
.....	.....	.....	.....	90 52	145,116 14	7,273 14	1,988 24	154,377 52	17
.....	.....	464 80	.....	.....	7,750 60	3,608 10	19 50	11,378 20	18
.....	.....	.....	.....	.....	718 21	196 66	3 00	917 87	19
.....	.....	93 30	.....	30 97	9,198 27	729 50	57 90	9,985 67	20
.....	.....	.....	.....	.....	657 79	305 46	24 00	987 25	21
.....	.....	20 05	.....	.....	576 94	1,563 07	74 65	2,214 66	22
.....	.....	.....	.....	12 45	1,708 36	656 09	71 40	2,435 85	23
.....	.....	181 25	4 04	145 49	254,616 32	19,703 15	5,998 93	280,318 40	24
.....	.....	.....	.....	151 86	64,998 96	9,205 36	6,465 05	80,669 37	25
.....	.....	2 05	.....	1 63	1,816 90	515 89	173 32	2,506 11	26
.....	.....	18 88	.....	40 91	17,664 61	2,545 78	135 95	20,346 34	27
.....	.....	1,362 65	.....	15 44	12,728 08	8,532 80	2,126 96	23,387 84	28
.....	27,112 88	16,582 71	223 86	1,257 99	853,479 87	281,889 16	61,014 41	1,196,383 44	
.....	.....	.....	.....	8 02	25,353 32	14,932 06	2,517 54	42,802 92	29
.....	.....	.....	.....	20 38	6,036 39	5,119 33	1,381 56	12,537 28	30
.....	.....	.....	.....	28 40	31,389 71	20,051 39	3,899 10	55,340 20	
.....	.....	.....	.....	773 90	17,513 39	8,141 84	1,115 86	26,771 09	31
.....	.....	.....	.....	4 31	19,200 82	5,235 25	817 88	25,253 95	32
.....	.....	110 35	.....	88 10	16,284 26	1,051 57	249 84	17,585 67	33
.....	.....	.....	.....	262 38	40,278 54	63,262 60	3,910 19	107,451 33	34
.....	.....	.....	.....	.....	283 25	1,841 09	15 00	2,139 34	35
.....	.....	.....	48 08	135 79	80,761 41	56,768 41	3,436 79	140,966 61	36
.....	.....	.....	.....	876 80	16,436 72	963 64	416 49	17,816 85	37
.....	.....	.....	.....	.....	31,850 96	858 97	233 30	32,943 23	38
.....	.....	297 30	.....	.....	1,067 86	1,393 14	66 90	2,527 90	39
.....	19,842 24	921 55	6 14	239 05	295,034 67	159,802 08	15,071 27	469,908 02	40
.....	.....	.....	.....	99 53	38,434 66	10,555 23	2,034 05	51,023 94	41
.....	.....	.....	.....	19 43	20,290 69	13,607 55	4,854 30	38,752 54	42
.....	19,842 24	1,329 20	54 22	2,499 29	577,437 23	323,481 37	32,221 87	933,140 47	
.....	.....	.....	.....	0 17	3,281 15	10,714 72	7,903 26	21,899 13	43
.....	.....	.....	.....	85 14	74,631 36	7,442 58	1,399 06	83,473 00	44
.....	.....	314 70	.....	323 31	45,772 23	20,456 08	1,738 14	67,966 45	45
.....	.....	.....	.....	.....	7,325 57	1,686 04	301 23	9,312 84	46
.....	.....	.....	.....	1 16	29,751 20	18,728 91	196 93	48,677 04	47
.....	.....	.....	.....	.....	1,549 43	227 79	6 00	1,783 22	48
.....	.....	.....	.....	150 85	77,483 82	5,048 10	726 85	83,258 77	49
.....	.....	35 55	75 30	888 26	651,192 66	18,463 28	1,511 24	671,167 18	50
.....	.....	.....	.....	.....	3,917 88	725 46	916 24	5,559 58	51
.....	3,278,621 92	2,094,975 51	3,355 57	63,485 47	19,965,695 45	2,899,975 98	297,263 69	23,162,935 12	52
.....	.....	2,034 35	.....	119 60	3,616 53	249 57	33 00	3,899 10	53
.....	.....	.....	.....	.....	874 34	497 69	.....	1,372 03	54
.....	377,883 30	5,461 08	32 10	6,691 65	1,175,675 13	240,200 40	28,891 64	1,444,767 17	55
.....	.....	911 60	.....	102 67	18,411 51	3,770 78	2,128 96	24,311 25	56
.....	.....	.....	.....	460 39	51,660 39	21,344 69	502 32	73,507 40	57
.....	3,928 74	10,552 45	.....	1,524 09	410,252 64	75,619 32	9,422 61	495,294 57	58
.....	.....	.....	.....	291 16	33,490 15	1,748 62	167 16	35,405 93	59
.....	.....	.....	.....	34 63	7,065 44	3,951 18	1,064 24	12,080 86	60
.....	.....	.....	.....	.....	13 50	7,939 59	275 65	8,228 74	61
.....	.....	.....	.....	66 07	94,304 05	10,279 58	2,694 47	107,278 10	62
.....	.....	.....	11 32	69 54	154,454 23	41,837 57	17,720 92	214,012 74	63
.....	.....	.....	.....	173 59	98,758 67	36,369 21	5,910 74	141,038 62	64
.....	.....	.....	.....	1 37	47,645 31	3,260 34	6 38	50,912 03	65
.....	3,660,433 96	2,114,285 24	3,474 29	74,469 12	22,956,822 64	3,430,537 48	380,780 73	26,768,140 85	

STATEMENT showing Excise Taxes (Domestic and Impor

	Ports	Licenses	Stamps	Automobiles	Matches	Sales	Playing Cards	Cigars
		$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
	ONTARIO—							
1	Amherstburg	84 00	6,727 84			18,987 19		
2	Belleville	218 50	10,221 18			695,720 38		
3	Bowmanville	28 00	1,380 02			208,690 30		
4	Brantford	372 00	13,801 91			325,811 19		
5	Bridgeburg	114 00	2,659 47			67,200 82		
6	Brockville	98 00	4,462 28			51,130 82		
7	Chatham	178 00	12,583 05	30,597 29		73,527 63		
8	Cobourg	88 00	3,248 19			27,709 42		
9	Collingwood	134 00	4,301 12			27,758 49		
10	Cornwall	54 00	6,191 34			90,517 82		
11	Deseronto	8 00	358 94			3,357 15		
12	Fort Frances	30 00	2,839 86			18,303 88		
13	Fort William	96 00	7,316 39			32,168 92		
14	Galt	294 00	7,948 79			369,101 78		
15	Gananoque	36 00	1,822 12			5,659 74		
16	Goderich	172 00	9,120 92			101,376 08		
17	Guelph	354 00	17,331 95	1,879 47		471,940 95		
18	Hamilton	1,322 00	63,161 66	1,069 24		2,753,802 24		32,432 22
19	Ingersoll	44 00	2,996 66			21,662 76		
20	Kenora	52 00	2,780 58			27,181 15		
21	Kingston	150 00	7,927 25	408 50		58,025 95		
22	Kitchener	486 00	18,027 78			711,609 69		69 30
23	Lindsay	164 00	5,954 83			37,299 84		
24	London	742 00	38,067 08	218 78		770,816 91		19,097 18
25	Midland	94 00	2,547 78			29,481 75		
26	Morrisburg	6 00	2,133 76			6,664 39		
27	Napanee	36 00	2,172 84			15,676 12		
28	Niagara Falls	238 00	8,301 57			208,569 77		92 70
29	North Bay	294 00	28,229 97			90,683 34		
30	Orillia	251 00	7,343 41			56,418 35		
31	Oshawa	110 00	10,491 23	315,316 22		1,766,746 85		
32	Ottawa	1,104 00	96,633 15	690 30	868,041 31	798,486 80		
33	Owen Sound	120 00	7,806 62			107,505 70		567 27
34	Paris	48 00	2,184 72			166,641 27		
35	Parry Sound	128 00	1,463 60			11,838 34		
36	Peteroboro	166 00	10,325 69			403,108 07		
37	Picton	52 00	2,559 84			10,541 05		
38	Port Arthur	70 00	6,529 37			50,413 36		
39	Port Hope	50 00	2,480 68			20,681 70		
40	Port McNicoll	4 00	174 64			37 87		
41	Prescott	54 00	2,086 36			119,132 92		
42	Sarnia	156 00	10,561 62			1,917,470 08		
43	Sault Ste. Marie	118 00	8,927 92			405,625 07		26 30
44	Simcoe	142 00	5,202 95			31,247 17		
45	Stratford	236 00	10,737 98	1,088 50		250,974 11		9 10
46	Sudbury	72 00	9,442 07			75,803 06		
47	St. Catharines	364 00	11,755 57			264,603 04		51 02
48	St. Thomas	123 00	10,328 86			77,257 03		211 25
49	Tillsonburg	54 00	2,097 58			19,573 31		
50	Toronto	8,292 00	1,018,823 30	158,239 89	5,221 04	11,527,277 89		88,909 93
51	Trenton	28 00	1,810 28			17,715 35		
52	Wallaceburg	18 00	1,576 27			11,999 67		
53	Welland	168 00	6,758 30			93,930 69		14 32
54	Whitby	60 00	3,239 14			5,530 72		
55	Windsor	620 00	39,625 52	504,875 73		2,674,169 43	156,000 00	
56	Woodstock	140 00	6,132 88			127,696 60		
		18,734 50	1,591,716 68	1,014,383 92	873,262 35	28,332,861 97	156,000 00	141,480 59
	MANITOBA—							
57	Brandon	54 00	17,047 88			15,480 63		
58	Emerson		272 98					
59	Gretna		482 12					
60	Portage la Prairie	56 00	16,142 88			26,879 73		
61	Winnipeg	1,272 00	157,995 12	233 74		1,590,176 45		
		1,382 00	191,940 98	233 74		1,632,536 81		
	SASKATCHEWAN—							
62	Moose Jaw	138 00	54,781 96			26,982 24		
63	North Portal	14 00	4,754 91			10,432 46		
64	Prince Albert	50 00	23,579 06			45,129 26		
65	Regina	170 00	71,674 03			153,381 53		
66	Saskatoon	152 00	51,629 42			73,285 11		
		524 00	206,419 38			309,210 60		

tations) collected during the fiscal year 1928-29—*Continued*

Wines	Ale, Beer, etc.	Transportation	Embossed cheques	Penalties and Interest	Domestic Total	Importations		Grand Total	
						Sales	Excise		
$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	
.....	.....	979 35	.....	61 33	26,839 71	14,793 41	44 15	41,677 27	1
.....	1,971 41	.....	.....	378 75	708,510 22	21,567 84	11,729 91	741,807 97	2
.....	.....	.....	.....	3 02	210,101 34	2,420 35	15 56	212,537 25	3
523 00	17,566 42	.....	65 28	81 61	358,221 41	33,747 29	369 52	392,338 22	4
100 41	.....	.....	.....	26 35	70,101 05	51,940 19	38,805 24	160,846 48	5
.....	.....	122 10	.....	74 21	55,887 41	8,969 04	1,005 75	65,862 20	6
.....	.....	.....	78 90	248 25	117,213 12	26,030 82	278 34	143,522 28	7
.....	.....	.....	.....	57 42	31,103 03	6,716 73	62 81	37,882 57	8
.....	.....	.....	.....	94 86	32,288 47	2,617 53	131 82	35,037 82	9
.....	.....	35 80	.....	2,750 22	99,549 18	19,788 57	1,434 40	120,772 15	10
.....	.....	.....	.....	4 61	3,728 70	382 39	7 50	4,118 59	11
.....	13,166 28	.....	.....	4 41	34,344 43	10,908 42	126 26	45,379 11	12
1,220 69	11,835 67	37 25	.....	34 56	52,709 48	153,251 50	5,506 86	211,467 84	13
.....	25,263 04	1,301 40	19 96	1,172 01	405,100 98	20,827 10	272 94	426,201 02	14
.....	.....	.....	.....	8 38	7,526 24	3,867 24	524 16	11,917 64	15
.....	.....	10 85	.....	29 96	110,709 81	5,717 21	404 32	116,831 34	16
60 84	17,717 05	9 00	52 24	1,109 78	510,455 28	24,674 90	1,824 17	536,954 35	17
1,902 05	233,320 98	1,153 50	1,088 98	3,353 05	3,092,605 92	306,973 88	6,643 25	3,406,223 05	18
.....	.....	.....	5 24	29 50	24,738 16	4,876 90	21 30	29,636 36	19
.....	3,319 16	6 30	.....	23 21	33,362 40	10,425 65	825 84	44,613 89	20
.....	18,463 28	1,237 07	.....	99 14	86,311 19	16,970 54	2,593 21	105,874 94	21
307 19	112,522 16	.....	132 82	980 00	844,134 94	48,441 54	1,297 94	893,874 42	22
.....	.....	.....	.....	745 92	44,164 59	6,610 85	1,354 27	52,129 71	23
2,588 61	665,106 61	558 50	203 64	2,653 74	1,500,053 05	131,926 62	2,078 54	1,634,058 21	24
.....	.....	229 10	.....	201 97	32,554 60	2,618 45	666 14	35,839 19	25
.....	.....	.....	.....	15 40	8,819 55	2,022 30	433 53	11,275 38	26
.....	.....	.....	.....	24 88	17,909 84	6,645 75	32 40	24,587 99	27
127,147 02	.....	15 00	.....	185 01	344,549 07	112,103 09	74,031 87	530,684 03	28
.....	.....	20,577 02	.....	2,688 39	142,472 72	59,667 81	9,003 50	211,144 03	29
.....	.....	1,152 00	.....	316 96	65,481 72	7,952 71	1,997 08	75,431 51	30
.....	.....	282 00	.....	145 30	2,093,091 60	39,709 42	18,848 51	2,151,649 53	31
.....	114,538 33	224,887 24	482 56	5,843 98	2,110,707 67	262,792 75	35,156 43	2,408,656 85	32
.....	.....	1,027 55	.....	115 24	117,142 38	10,114 99	2,873 74	130,131 11	33
.....	.....	.....	.....	273 70	169,147 69	6,134 36	.....	175,282 05	34
.....	.....	13 25	.....	360 51	13,803 70	1,640 25	147 66	15,591 61	35
.....	.....	.....	.....	405 95	414,005 71	35,509 44	4,908 18	454,423 33	36
.....	.....	.....	.....	3 98	13,156 87	1,731 96	206 80	15,095 63	37
.....	23,399 78	111 50	.....	450 43	80,974 44	48,080 11	5,753 00	134,807 55	38
.....	.....	.....	.....	76 50	23,288 88	2,525 14	3 07	25,817 09	39
.....	.....	.....	.....	.....	216 51	347 79	.....	564 30	40
.....	.....	52 15	.....	3 53	121,328 96	6,306 27	3,024 97	130,660 20	41
.....	2,088 24	64 20	1 56	52 08	1,930,393 78	78,510 35	25,167 65	2,034,071 78	42
.....	17,038 03	2,569 54	.....	357 95	434,662 81	28,298 63	5,996 18	468,957 62	43
.....	.....	.....	.....	39 12	36,631 24	9,434 24	8,587 65	54,653 13	44
.....	1,922 80	.....	.....	239 01	265,207 50	25,714 15	1,076 75	291,998 40	45
140 67	31,422 78	30 00	.....	1,108 40	118,018 98	25,338 14	3,830 95	147,188 08	46
55,769 68	65,126 99	1,885 30	21 82	1,272 09	400,849 51	42,637 43	3,273 43	446,760 37	47
.....	.....	.....	.....	192 72	88,112 86	38,129 13	7,457 52	133,699 51	48
.....	.....	.....	.....	44 61	21,769 50	4,329 04	27 50	26,126 04	49
6,767 46	340,312 20	183,344 85	3,645 92	39,279 22	13,380,113 70	3,527,437 06	203,732 88	17,111,283 64	50
.....	.....	.....	.....	9 88	19,563 51	3,887 68	49 50	23,500 69	51
.....	.....	.....	.....	0 17	13,594 11	4,086 08	267 46	17,947 65	52
159 56	21,334 42	.....	29 96	1,124 91	123,520 16	26,264 11	4,366 19	154,150 46	53
.....	.....	.....	.....	27 01	8,856 87	822 86	279 26	9,958 99	54
4,691 17	696,396 26	65 00	210 26	3,292 29	4,079,945 66	713,953 66	659,542 40	5,453,441 72	55
.....	.....	.....	.....	325 12	134,294 60	14,189 21	13 89	148,497 70	56
201,378 35	2,433,831 89	441,756 82	6,039 14	72,500 60	35,283,946 81	6,083,380 87	1,158,114 16	42,525,441 84	
.....	26,811 78	.....	.....	85 49	59,479 78	38,901 39	4,036 30	102,417 47	57
.....	.....	.....	.....	.....	272 98	17,183 20	3,773 64	21,229 82	58
.....	.....	.....	.....	.....	482 12	3,300 20	346 16	4,128 48	59
.....	.....	778 15	.....	3 65	43,860 41	31,716 57	2,313 49	77,890 47	60
906 35	462,881 70	19,905 20	1,270 44	4,894 08	2,239,535 08	1,177,294 14	103,659 83	3,520,489 05	61
906 35	489,693 48	20,683 35	1,270 44	4,983 22	2,343,630 37	1,268,395 50	114,129 42	3,726,155 29	
.....	27,781 96	.....	55 04	3 01	109,742 21	108,940 33	24,725 93	243,408 47	62
.....	21,149 40	.....	.....	.....	36,350 77	23,995 66	3,496 24	63,842 67	63
.....	52,065 00	.....	27 88	83 63	120,934 83	13,570 11	4,190 52	138,695 46	64
.....	68,827 76	5 00	196 62	99 23	294,354 17	390,207 33	36,910 85	721,472 35	65
.....	80,035 65	.....	54 06	365 60	205,521 84	167,797 21	25,676 79	398,995 84	66
.....	249,859 77	5 00	333 60	551 47	766,903 82	704,510 64	95,000 33	1,566,414 79	

STATEMENT showing Excise Taxes (Domestic and Impor

	Ports	Licenses	Stamps	Automobiles	Matches	Sales	Playing Cards	Cigars
		$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
	ALBERTA—							
1	Calgary	428 00	91,722 93	512 75	.....	400,702 79	.....	307 62
2	Edmonton	614 00	79,948 81	266 50	.....	315,324 74	.....	.....
3	Lethbridge	72 00	18,307 07	164 50	.....	85,149 26	.....	.....
4	Medicine Hat	36 00	5,728 18	.....	.....	31,336 40	.....	.....
		1,150 00	195,706 99	943 75	.....	832,513 19	.....	307 62
	BRITISH COLUMBIA—							
5	Abbottsford	76 00	1,873 34	.....	.....	14,130 56	.....	.....
6	Cranbrook	44 00	3,098 48	.....	.....	23,585 98	.....	.....
7	Fernie	36 00	1,307 34	.....	.....	11,088 31	.....	.....
8	Grand Forks	12 00	784 51	.....	.....	6,422 73	.....	.....
9	Nanaimo	132 00	8,773 94	.....	.....	52,409 43	.....	207 47
10	Nelson	14 00	4,932 44	55 25	.....	28,732 84	.....	.....
11	New Westminster	270 00	12,551 00	.....	.....	262,185 52	.....	298 50
12	Penticton	38 00	7,095 22	.....	.....	17,524 66	.....	.....
13	Prince Rupert	292 00	7,777 11	.....	.....	44,428 19	.....	.....
14	Revelstoke	198 00	10,026 40	.....	.....	30,290 03	.....	.....
15	Rossland	38 00	3,173 33	.....	.....	10,439 17	.....	.....
16	Vancouver	2,259 00	157,123 29	2,593 57	.....	1,203,266 13	.....	4,472 34
17	Victoria	256 00	23,944 61	2,464 42	.....	222,304 24	.....	123 03
		3,665 00	242,461 01	5,113 24	.....	1,926,806 89	.....	5,101 34
	YUKON TERRITORY—							
18	Dawson	4 00	538 70	.....	.....	403 49	.....	.....
19	White Horse	2 00	239 20	.....	.....	526 99	.....	.....
		6 00	777 90	.....	.....	930 48	.....	.....
	SUMMARY—							
20	Nova Scotia	1,134 00	73,094 72	888 96	.....	733,046 46	.....	138 29
21	Prince Edward Island	282 00	9,911 82	.....	.....	21,167 49	.....	.....
22	New Brunswick	1,029 00	55,869 33	358 87	.....	496,349 44	.....	105 64
23	Quebec	10,783 00	1,299,911 52	3,738 51	629,132 47	14,866,212 18	112,752 00	181,630 35
24	Ontario	18,734 50	1,591,716 68	1,014,383 92	873,262 35	28,332,861 97	156,000 00	141,480 59
25	Manitoba	1,382 00	191,940 98	233 74	.....	1,632,536 81	.....	.....
26	Saskatchewan	524 00	206,419 38	.....	.....	309,210 60	.....	.....
27	Alberta	1,150 00	195,706 99	943 75	.....	832,513 19	.....	307 62
28	British Columbia	3,665 00	242,461 01	5,113 24	.....	1,926,806 89	.....	5,101 34
29	Yukon Territory	6 00	777 90	.....	.....	930 48	.....	.....
		.....	.....	.....	.....	.....	.....	.....
		.....	.....	.....	.....	.....	.....	.....
		38,689 50	3,867,810 33	1,025,660 99	1,502,394 82	49,151,635 51	268,752 00	328,763 83

tations) collected during the fiscal year 1928-29—*Concluded*

Wines	Ale, Beer, etc.	Transportation	Embossed cheques	Penalties and Interest	Domestic Total	Importations		Grand Total	
						Sales	Excise		
$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	
.....	266,974 41	10 00	125 74	7,555 30	768,339 54	367,676 94	71,076 46	1,207,092 94	1
.....	163,120 67	9,938 88	.....	1,413 81	570,627 41	255,602 51	50,681 17	876,911 09	2
.....	192,773 13	.....	.....	805 12	297,271 08	51,058 26	8,015 08	356,344 42	3
.....	987 94	.....	.....	512 28	38,600 80	15,965 22	3,213 58	57,779 60	4
.....	623,856 15	9,948 88	125 74	10,286 51	1,674,838 83	690,302 93	132,986 29	2,498,128 05	
.....	.....	.....	.....	234 15	16,314 05	8,387 41	484 98	25,186 44	5
.....	15,949 15	15 00	.....	199 86	42,891 57	9,945 36	4,245 40	57,082 33	6
.....	21,612 53	10 00	21 60	101 28	34,177 06	8,538 76	309 16	43,024 98	7
.....	.....	.....	.....	4 79	7,224 03	5,728 55	396 67	13,349 25	8
.....	.....	140 50	.....	129 25	61,792 59	7,614 46	19 96	69,427 01	9
.....	21,597 28	.....	47 20	456 67	55,835 68	9,703 58	2,897 54	68,436 80	10
220 60	45,256 18	20 00	.....	1,422 09	322,223 89	31,573 90	13,202 03	366,999 82	11
.....	5,318 77	2,048 45	.....	162 38	32,187 48	5,722 67	692 48	38,602 63	12
.....	.....	41 00	131 22	253 97	52,923 49	18,383 78	1,765 50	73,072 77	13
.....	4,342 66	5 00	.....	397 99	45,260 08	8,576 99	2,436 97	56,274 04	14
.....	2,850 12	.....	.....	133 15	16,633 77	11,336 87	1,764 79	29,735 43	15
592 02	229,677 07	39,054 79	1,377 18	13,402 33	1,653,817 72	1,340,274 03	104,987 77	3,099,079 52	16
8,619 88	101,899 15	1,870 95	177 30	459 05	362,118 63	212,889 70	18,604 92	593,613 25	17
9,432 50	448,502 91	43,205 69	1,751 50	17,356 96	2,703,400 04	1,678,676 06	151,808 17	4,533,884 27	
.....	.....	.....	.....	.....	946 19	2,946 24	189 70	4,082 13	18
.....	.....	4 50	.....	.....	772 69	9,430 13	216 19	10,419 01	19
.....	.....	4 50	.....	.....	1,718 88	12,376 37	405 89	14,501 14	
.....	27,112 88	16,582 71	223 86	1,257 99	853,479 87	281,889 16	61,014 41	1,196,383 44	20
.....	.....	.....	.....	28 40	31,389 71	20,051 39	3,899 10	55,340 20	21
.....	19,842 24	1,329 20	54 22	2,499 29	577,437 23	323,481 37	32,221 87	933,140 47	22
.....	3,660,433 96	2,114,285 24	3,474 29	74,469 12	22,956,822 64	3,430,537 48	380,780 73	26,768,140 85	23
201,378 35	2,433,831 89	441,756 82	6,039 14	72,500 60	35,283,946 81	6,083,380 87	1,158,114 16	42,525,441 84	24
906 35	489,693 48	20,683 35	1,270 44	4,983 22	2,343,630 37	1,268,395 50	114,129 42	3,726,155 29	25
.....	249,859 77	5 00	333 60	551 47	766,903 82	704,510 64	95,000 33	1,566,414 79	26
.....	623,856 15	9,948 88	125 74	10,286 51	1,674,838 83	690,302 93	132,986 29	2,498,128 05	27
9,432 50	448,502 91	43,205 69	1,754 50	17,356 96	2,703,400 04	1,678,676 06	151,808 17	4,533,884 27	28
.....	.....	4 50	.....	.....	1,718 88	12,376 37	405 89	14,501 14	29
British Post Office Parcels				.....	.....	1,433 94	.....	1,433 94	
Embossed Cheques (Departmental)			195,201 50	.....	195,201 50	.....	.....	195,201 50	
211,717 20	7,953,133 28	2,647,801 39	208,477 29	183,933 56	67,388,769 70	14,495,035 71	2,130,360 37	84,014,165 78	

INCOME TAXES

INCOME TAX DIVISION,

OTTAWA, July 26, 1929.

Honourable W. D. EULER,
Minister of National Revenue,
Ottawa.

SIR,—I have the honour to submit a statement showing the amount of taxes collected under the Income War Tax Act for the fiscal year ended March 31, 1929.

I have the honour, to be, sir,

Your obedient servant,

C. S. WALTERS,
Commissioner of Income Tax

INCOME TAX DIVISION.—STATEMENT showing Amount Collected under the Income Tax Act during the Fiscal Year 1928-1929, classified as to Taxation Years and Districts

Districts	1917 Assessments paid	1918 Assessments paid	1919 Assessments paid	1920 Assessments paid	1921 Assessments paid	1922 Assessments paid	1923 Assessments paid	1924 Assessments paid	1925 Assessments paid	1926 Assessments paid	1927 Assessments paid	1928 Assessments paid	1929 Assessments paid in advance	Total
	$	$	$	$	$	$	$	$	$	$	$	$	$	$
1. Halifax	2,376 95	1,903 75	7,423 34	11,358 58	D 1,822 08	4,023 81	21,168 85	23,330 89	11,799 73	32,826 86	506,305 32	11,307 54	.....	632,003 54
2. St. John	462 19	594 12	3,729 07	11,856 03	1,490 51	2,165 11	1,464 65	2,518 09	2,677 69	10,556 13	503,966 10	12,206 70	.....	553,686 39
3. Quebec	1,349 00	7,101 36	9,666 54	14,293 42	18,698 69	12,135 89	28,375 27	29,133 00	16,821 05	63,102 17	1,051,306 99	14,884 15	.....	1,266,867 53
4. Montreal	18,232 66	19,239 74	71,671 97	115,851 72	129,044 79	79,481 06	128,628 13	198,489 62	196,917 12	323,373 30	16,854,674 27	227,096 20	.....	18,362,700 58
5. Ottawa	190 32	430 99	3,305 49	6,019 36	8,052 33	4,022 97	7,007 94	9,399 61	9,425 55	46,146 00	2,288,291 04	17,867 38	.....	2,400,158 98
6. Kingston	102 82	139 39	834 55	2,218 12	587 38	1,036 98	1,678 33	1,971 66	21,624 28	21,674 73	365,186 84	2,084 74	.....	419,139 82
7. Belleville	6 19	54 57	190 97	395 89	1,142 73	2,512 21	2,328 38	14,083 91	945 92	10,327 12	299,337 08	5,348 84	.....	336,673 81
8. Toronto	4,523 56	25,045 65	36,389 30	74,584 16	146,144 98	103,026 41	166,624 62	266,369 41	452,969 07	719,720 07	14,297,020 26	111,862 10	256 50	16,404,536 09
9. Hamilton	104 20	2,668 91	560 36	853 73	15,316 78	43,130 04	57,012 93	96,159 68	207,970 20	88,885 73	4,166,216 41	34,732 30	.....	4,713,611 27
10. London	.....	562 70	2,491 65	14,968 38	17,942 93	D 6,152 70	D 698 49	47,522 76	50,486 87	51,005 99	3,930,088 81	72,604 16	.....	4,180,823 06
11. Ft. William	49 44	D 171 92	423 86	1,313 39	2,264 59	213 19	15,619 60	8,947 80	5,630 27	31,378 18	354,813 69	7,447 35	.....	427,929 44
12. Winnipeg	51 54	936 40	9,448 48	7,137 57	9,329 44	9,643 14	9,320 34	31,706 14	69,546 72	180,753 92	2,922,722 25	22,009 92	.....	3,272,605 86
13. Regina	1,669 47	1,778 16	8,861 54	6,408 83	4,210 36	3,568 28	3,386 39	4,917 73	5,020 03	76,051 23	502,527 78	15,433 24	.....	633,833 04
14. Saskatoon	606 88	1,742 91	4,030 45	3,263 88	2,444 80	3,712 46	5,162 64	7,384 71	3,597 28	17,402 56	150,668 90	5,225 94	.....	205,243 41
15. Pr. Albert	.....	D 35 00	278 47	340 91	303 15	262 59	173 64	D 423 48	794 81	3,054 93	47,821 41	2,846 02	.....	55,417 45
16. Calgary	1,344 83	3,494 71	5,449 49	17,590 06	11,488 78	3,786 59	8,279 32	16,007 39	27,226 43	71,787 83	830,778 79	26,533 78	.....	1,023,768 00
17. Edmonton	389 82	525 75	2,589 38	3,213 91	4,391 25	2,469 27	999 75	2,532 80	D 253 37	11,714 11	346,852 63	6,412 71	.....	381,838 01
18. Vancouver	2,281 73	12,233 82	7,898 42	20,150 19	16,762 78	13,785 37	32,096 83	48,694 15	89,565 71	130,391 92	3,691,919 49	56,379 35	1,043 18	4,123,202 94
19. Yukon	.....	.....	36 46	149 60	216 84	1,245 77	1,014 67	2,032 44	6,424 07	4,635 60	11,743 36	734 24	.....	28,233 05
Total	33,741 60	78,246 01	175,279 79	311,967 73	388,011 03	284,068 44	489,643 79	810,778 31	1,179,189 43	1,894,788 38	53,122,241 42	653,016 66	1,299 68	59,422,272 27

(D) Denotes refunds in excess of collections.

SHIPPING REPORT

RAPPORT DE LA NAVIGATION

94666—1

SHIPPING REPORT

OF THE

DEPARTMENT OF NATIONAL REVENUE

(CUSTOMS DIVISION)

CONTAINING THE

STATEMENTS OF NAVIGATION AND SHIPPING

OF THE

DOMINION OF CANADA

FOR

THE FISCAL YEAR ENDED MARCH 31

1929

COMPILED FROM OFFICIAL RETURNS IN THE
DEPARTMENT OF NATIONAL REVENUE

OTTAWA
F. A. ACLAND
PRINTER TO THE KING'S MOST EXCELLENT MAJESTY
1930

RAPPORT DE LA NAVIGATION

DU

MINISTÈRE DU REVENU NATIONAL

(SERVICE DES DOUANES)

CONTENANT LA

STATISTIQUE DE LA NAVIGATION INTÉRIEURE ET MARITIME

DU

DOMINION DU CANADA

POUR

L'EXERCICE SE TERMINANT LE 31 MARS

1929

RAPPORTS OFFICIELS COMPILÉS PAR LE
MINISTÈRE DU REVENU NATIONAL

OTTAWA
F. A. ACLAND
IMPRIMEUR DE SA TRÈS EXCELLENTE MAJESTÉ LE ROI
1930

W. D. EULER, Esq.,
Minister of National Revenue.

SIR,—I have the honour to hand you the Annual Shipping Report of the Department of National Revenue (Customs Division), containing statements of Navigation and Shipping of the Dominion of Canada for the fiscal year ended March 31, 1929, as compiled from official returns.

I have the honour to be, sir,

Your obedient servant,

R. W. BREADNER,
Commissioner of Customs.

OTTAWA, October 28, 1929.

M. W. D. EULER,
Ministre du Revenu national.

MONSIEUR,—J'ai l'honneur de vous soumettre le rapport annuel de la Navigation du ministère du Revenu national (Service des Douanes), comprenant les tableaux de la navigation intérieure et maritime du Dominion du Canada pour l'exercice se terminant le 31 mars 1929, tel que compilé des rapports officiels.

J'ai l'honneur d'être monsieur,

Votre tout dévoué,

R. W. BREADNER,
Commissaire des Douanes.

OTTAWA, le 28 octobre 1929.

To His Excellency the Right Honourable Viscount Willingdon, G.C.S.I., G.C.M.G., etc., etc., Governor General and Commander in Chief of the Dominion of Canada.

MAY IT PLEASE YOUR EXCELLENCY:

The undersigned has the honour to present to Your Excellency the Annual Report of the Department of National Revenue containing Statements of Navigation and Shipping of the Dominion of Canada for the fiscal year ended March 31, 1929, as compiled from official returns.

All of which is respectfully submitted.

W. D. EULER,
Minister of National Revenue.

OTTAWA, October 30, 1929.

A Son Excellence le Très Honorable Vicomte Willingdon, G.C.S.I., G.C.M.G etc., etc., Gouverneur général et Commandant en chef du Dominion du Canada.

QU'IL PLAISE À VOTRE EXCELLENCE:

Le soussigné a l'honneur de présenter à Votre Excellence le rapport annuel du ministère du Revenu National, comprenant les tableaux de la navigation et du commerce du Dominion du Canada pour l'exercice se terminant le 31 mars 1929 tel que compilé des rapports officiels.

Le tout respectueusement soumis.

W. D. EULER,
Ministre du Revenu National.

OTTAWA, le 30 octobre 1929.

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TONNAGE SHOWN IN STATEMENTS ARE NET TONS

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NOTE EXPLICATIVE

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No. 1.—Comparative Statement showing the Tonnage of all Vessels entered Inwards and Outwards, from 1868 to 1929 inclusive.

N° 1.—État comparatif indiquant le tonnage de tous les navires déclarés à l'entrée et à la sortie depuis 1868 à 1929 inclusivement.

NAVIGATION

Fiscal Year — Exercice	Vessels built — Navires construits	Vessels registered — Navires enregistrés	Vessels entered Inwards and Outwards (Sea-going and Inland Navigation exclusive of Coasting) — Navires déclarés à l'entrée et à la sortie (navigation maritime et intérieure à l'exclusion du cabotage)	Vessels entered and cleared Coastwise — Navires du cabotage déclarés à l'entrée et à la sortie	Vessels sold to other countries — Navires vendus à d'autres pays	
					Tonnage — Tonnage	Value — Valeur
	Tons — Tonnes	Tons — Tonnes	Tons — Tonnes	Tons — Tonnes	Tons — Tonnes	$
1868	87,230	113,692	12,982,825	.....	.....	.....
1869	96,439	125,408	10,461,044	.....	.....	.....
1870	93,166	110,852	11,415,870	.....	.....	.....
1871	106,101	121,724	13,126,028	.....	.....	.....
1872	114,065	127,371	12,808,160	.....	.....	.....
1873	140,370	152,226	11,748,997	.....	.....	.....
1874	174,404	163,016	11,399,857	.....	.....	.....
1875	188,098	204,002	9,537,155	.....	.....	.....
1876	165,041	144,422	9,911,199	10,300,939	64,134	2,189,270
1877	127,297	126,160	11,091,244	8,968,862	46,329	1,576,244
1878	106,976	100,089	12,054,890	11,047,661	35,039	1,218,145
1879	103,551	94,882	11,646,812	12,066,683	19,318	529,824
1880	68,756	64,982	13,577,845	14,053,013	16,208	464,327
1881	79,364	70,210	13,802,432	15,116,766	16,808	348,018
1882	68,240	78,076	13,379,882	14,791,064	16,161	402,311
1883	73,576	78,229	13,770,735	15,683,566	23,896	506,538
1884	70,287	80,822	14,359,026	15,473,707	17,368	416,756
1885	57,486	65,962	14,084,712	15,944,422	13,177	246,277
1886	37,531	40,872	13,969,232	16,368,274	14,343	266,363
1887	26,798	67,662	14,090,998	17,513,677	9,263	143,772
1888	22,698	33,298	15,217,308	18,789,279	14,479	289,969
1889	23,835	31,998	16,054,221	19,834,577	16,173	266,817
1890	39,434	53,853	18,446,100	22,797,115	22,844	442,781
1891	55,477	52,506	18,803,648	24,694,580	15,143	280,474
1892	44,321	61,457	18,692,455	24,783,844	36,399	506,747
1893	38,521	45,796	18,539,534	24,579,123	31,317	363,916
1894	23,497	29,878	20,353,081	26,560,968	21,960	243,429
1895	18,728	26,125	19,100,963	25,473,434	16,567	172,563
1896	10,753	14,144	21,870,473	27,431,753	12,203	99,392
1897	12,058	22,959	23,373,933	27,267,979	9,158	105,164
1898	22,426	27,716	24,746,116	29,163,950	17,210	191,069
1899	22,085	28,257	25,420,110	30,212,496	7,562	126,466
1900	28,544	40,443	26,914,095	33,631,730	13,354	205,618
1901	20,156	35,156	26,029,808	34,444,796	4,490	66,468
1902	28,288	34,236	30,025,404	40,700,907	11,360	235,865
1903	30,856	41,405	33,655,043	44,990,358	11,172	220,602
1904	28,397	33,192	31,202,205	45,505,122	7,208	87,115
1905	21,865	27,583	32,277,820	44,377,261	3,696	100,363
1906	18,724	37,639	34,732,172	46,324,062	9,487	187,725
1907*	33,205	31,635	30,595,891	31,691,420	3,855	68,190
1908	49,928	78,144	39,575,031	50,529,835	4,515	132,900
1909	29,023	32,899	40,701,603	52,670,198	3,644	98,643
1910	24,059	33,383	44,567,991	56,750,928	5,047	133,800
1911	22,812	50,006	47,429,545	66,627,934	5,885	201,526
1912	31,065	30,021	52,973,127	66,267,662	4,265	140,350
1913	24,325	30,225	57,849,783	73,644,713	7,976	610,650
1914	46,887	46,909	61,919,483	78,356,809	8,258	169,618
1915	45,721	55,384	53,604,153	73,099,982	17,044	1,150,950
1916	13,497	102,239	57,721,098	68,709,424	4,529	192,575
1917	28,638	105,826	65,712,544	64,895,622	24,954	4,398,570
1918	53,912	70,350	66,802,488	61,462,600	25,252	5,330,850
1919	104,444	102,883	53,229,048	54,503,325	48,965	14,612,338
1920	164,074	237,022	49,493,533	60,552,658	53,407	17,819,477
1921	95,838	188,915	54,648,630	56,225,509	34,623	8,456,573
1922	78,409	131,732	56,665,253	61,827,089	25,462	3,399,450
1923	14,868	57,446	72,403,183	70,970,078	26,394	1,009,327
1924	20,336	74,311	74,947,373	77,365,128	17,076	605,211
1925	36,147	48,054	77,939,051	80,619,819	21,689	717,730
1926	39,840	88,380	75,246,827	82,887,655	24,673	1,413,150
1927	32,801	79,448	77,341,659	85,742,386	27,027	1,984,040
1928	12,904	64,301	83,803,797	89,527,616	16,307	599,490
1929	49,798	155,972	93,735,227	97,053,685	18,627	154,750

* 9 months—9 mois.

No. 2.—Statement showing the Description, Number and Tonnage of Vessels built and registered, also the Number, Tonnage and Value of Vessels sold to other Countries at each Port and Outport in the Dominion of Canada during the Fiscal Year ended March 31, 1929

N° 2.—État indiquant la description, le nombre et le tonnage des navires construits et enregistrés, ainsi que le nombre, le tonnage et la valeur des navires vendus à d'autres pays dans chaque port et port secondaire du Dominion du Canada durant l'exercice financier se terminant le 31 mars 1929

Ports and Outports—Ports et ports secondaires	Built—Construits						Registered—Enregistrés						Ships sold to other countries — Navires vendus à d'autres pays		
	Steam and motor — Vapeurs		Sail — Voiliers		Total		Steam and motor — Vapeurs		Sail — Voiliers		Total				
	No.	Tonnage	No.	Tonnage	No.	Tonnage	No.	Tonnage	No.	Tonnage	No.	Tonnage	No.	Tonnage	Value-Valeur
Arichat, N.S.							1	10			1	10			
Barrington Passage, N.S.	8	124			8	124	9	163			9	163			
Canso, N.S.							9	58			9	58			
Charlottetown, P.E.I.							3	323	4	248	7	571	2	83	
Chatham, N.B.	3	27	1	19	4	46	6	59	1	19	7	78			
Chatham, Ont.							1	10			1	10			
Collingwood, Ont.	2	780			2	780	2	780			2	780			
Digby, N.S.	1	66			1	66	1	56			1	56			
Halifax, N.S.	11	14,679			11	14,679	11	14,679			11	14,679	6	14,725	
Kenora, Ont.	1	16			1	16	1	16			1	16			
Kingston, Ont.			1	22	1	22			1	22	1	22			
Liverpool, N.S.	3	140			3	140	1	10			1	10			
Lunenburg, N.S.	13	565	1	97	14	662	13	565	1	97	14	662	8	737	54,100
Midland, Ont.							1	209			1	209			
Montreal, Que.	6	555	2	1,824	8	2,379	33	104,282	5	2,611	38	106,893			
New Westminster, B.C.	13	153	5	2,251	18	2,404	14	170	8	2,676	22	2,846			
Ottawa, Ont.	20	348			20	248	23	422			23	422			
Parrsboro, N.S.	1	14			1	14	3	182	2	558	5	740			
Paspebiac, Que.	1	10			1	10	1	10			1	10			
Pictou, N.S.	1	22			1	22									
Port Dover, Ont.	4	36			4	36									
Port Hope, Ont.									1	190	1	190			
Prince Rupert, B.C.	13	119			13	119	13	119			13	119			
Quebec, Que.	4	1,009	2	247	6	1,256	8	639	2	48	10	687			
Richibucto, N.B.	1	11			1	11	2	17			2	17			
Shelburne, N.S.	17	667	2	252	19	919	3	254	1	152	4	406	6	288	68,500
Sorel, Que.	2	355	6	1,290	8	1,645	4	745	6	1,290	10	2,035			
St. Andrews, N.B.	1	67			1	67	5	88			5	88			
St. John, N.B.	3	274	4	370	7	644	6	324	5	400	11	724			
Port Stanley, Ont.	1	22			1	22	1	22			1	22			
Sydney, N.S.	15	195			15	195	15	195			15	195			
Toronto, Ont.	6	343			6	343	19	483	1	4	20	487			
Vancouver, B.C.	60	1,496	45	3,820	105	5,316	50	1,224	38	3,327	88	4,551	3	1,723	3,900
Victoria, B.C.	26	16,518	9	481	35	16,999	26	16,518	9	481	35	16,999	2	47	9,250
Weymouth, N.S.	7	257			7	257	8	312			8	312			
Windsor, Ont.							1	633			1	633			
Winnipeg, Man.	1	17			1	17	2	32			2	32			
Yarmouth, N.S.	4	192	1	48	5	240	4	192	1	48	5	240	3	1,024	19,000
Total	249	39,077	79	10,721	328	49,798	300	143,801	86	12,171	386	155,972	30	18,627	154,750

No. 3.—STATEMENT showing the Trade via St. Lawrence River (Sea-going Vessels) Inwards and Outwards.

N° 3.—ÉTAT du commerce *via* le fleuve Saint-Laurent par long-courriers déclarés à l'entrée et à la sortie.

—	Vessels — Navires	Tons Register — Tonnage enregistré	Freight, Tons weight — Poids du fret en tonnes	Freight, Tons measurement — Mesurage du fret en tonnes
Inwards—à l'entrée	1,391	6,208,911	2,651,607	209,294
Outwards—à la sortie	1,559	5,607,681	6,699,248	378,922
Total trade—Total du commerce	2,950	11,816,592	9,250,855	588,216

No. 4.—Statement of Vessels, British, Canadian and Foreign entered Inwards *from* Sea, at each Port and Outport.

No.	Ports and Outports — Ports et ports secondaires	With Cargoes—Chargés									
		British—Britanniques					Canadian—Canadiens				
		Vessels — Navires	Tons register — Tonnage enregistré	Freight, Tons weight — Poids du fret en tonnes	Freight, Tons, measurement — Mesurage du fret en tonnes	Crew — Equipage	Vessels — Navires	Tons register — Tonnage enregistré	Feight Tons weight — Poids du fret en tonnes	Freight, Tons, measurement — Mesurage du fret en tonnes	Crew — Equipage
1	Albert, N.B.										
2	Alert Bay, B.C.										
3	Amherst, N.S.										
4	Amherst Harbour, Que.										
5	Annapolis Royal, N.S.						1	316	563	585	8
6	Anyox, B.C.										
7	Arichat, N.S.						16	229	244		74
8	Baddeck, N.S.	17	441			120	3	50			17
9	Bamfield, B.C.						2	2,661	461		58
10	Barrington Passage, N.S						5	163	260		26
11	Bathurst, N.B.						61	1,828	1,240	450	290
12	Bear River, N.S.										
13	Belleveau's Cove, N.S.						2	496	2		11
14	Blubber Bay, B.C.										
15	Bonne Esperance, Que.	15	5,720	108		405					
16	Bridgetown, N.S.						1	203	333	350	7
17	Bridgewater, N.S.						3	1,076	1,482		17
18	Britannia Beach, B.C.						37	29,140	10,037		589
19	Buctouche, N.B.										
20	Butedale, B.C.						27	400			108
21	Campbellton, N.B.						1	329	526		5
22	Campobello, N.B.						138	988	150		208
23	Canso, N.S.						2	691	1,157		12
24	Caraquet, N.B.						104	1,876	9,176		588
25	Charlottetown, P.E.I.	1	1,305	1,390		23	4	2,717	1,617		52
26	Chatham, N.B.										
27	Chemainus, B.C.						2	2,924	1,300		51
28	Chester, N.S.						28	411	466		97
29	Cheticamp, N.S.										
30	Chicoutimi, Que.										
31	Clark's Harbour, N.S.						18	866	987		91
32	Clementsport, N.S.						2	198	3	3	10
33	Digby, N.S.						14	1,292	760		71
34	Englewood, B.C.										
35	Freeport, N.S.						6	250	92		21
36	Gaspé, Que.						3	1,210	3,700		20
37	Georgetown, P.E.I.										
38	Glace Bay, N.S.						22	865	107	450	67
39	Guysboro, N.S.										
40	Halifax, N.S.	445	1,960,483	210,500		53,560	498	486,366	277,222		13,300
41	Havre St. Pierre, Que.						10	8,500			430
42	Hillsboro, N.B.										
43	Isaac's Harbour, N.S.										
44	Joggin Mines, N.S.										
45	Kentville, N.S.										
46	Kildonan, B.C.						8	1,824	652		72
47	Kingsport, N.S.										
48	Ladner, B.C.						1	26	1		6
49	Ladysmith, B.C.						1	183	99		6
50	La Have, N.S.						35	5,114	6,005		631
51	Levis, Que.	2	3,935	7,187		58					
52	Liverpool, N.S.	1	354	654		7	47	1,122	2,080		327
53	Lockeport, N.S.						13	593	359		211
54	Lord's Cove, N.B.						87	448	95		192
55	Louisburg, N.S.	4	7,241	8,856		164	2	217	325		20
56	Lower East Pubnico, N.S						3	101	79		7
57	Lunenburg, N.S.	10	1,621	1,680		94	238	26,961	30,282		4,043
58	Mahone Bay, N.S.						6	586	525		118
59	Maitland, N.S.										
60	Meteghan River, N.S.										
61	Moncton, N.B.						2	766	1,301		12
62	Montague, P.E.I.	2	102	1	1	9					
63	Montreal, Que.	448	2,392,719	824,458	148,627	63,689	141	409,318	500,870	12	5,786
64	Murray Harbor, P.E.I.										
65	Nanaimo, B.C.						8	5,614	1,687		104
66	New Westminster, B.C.	1	2,280	1,049		33	20	4,024	4,134		144
67	North East Harbor, N.S										
68	North Head, N.B.						93	14,885	634		984
69	North Sydney, N.S.	144	185,723	30,300		6,249					
70	Ocean Falls, B.C.						2	3,656	671		50
71	Parrsboro, N.S.						2	406	609		14
72	Paspebiac, Que.						1	520	100		30

N° 4.—ÉTAT des long-courriers britanniques, canadiens et étrangers déclarés à l'entrée à chaque port et port secondaire

Foreign—Étrangers					In Ballast—Sur lest									
					British — Britanniques			Canadian — Canadiens			Foreign — Étrangers			
Vessels — Navires	Tons register — Tonnage enregistré	Freight, Tons weight — Poids du fret en tonnes	Freight, Tons measurement — Mesurage du fret en tonnes	Crew — Equipage	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Equipage	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Equipage	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Equipage	No.
											1	200	4	1
14	345	96		32				13	587	67	39	32,324	207	2
					1	76	5	2	216	12				3
								1	268	8				4
								5	252	15				5
2	5,737	980		61				12	17,136	836	1	42	3	6
14	303	63		109				1	79	23	4	85	24	7
								3	3,730	70	24	33,880	570	8
								17	1,624	96	52	561	129	9
1	59	15		20							9	363	74	10
4	5,261	7,800		90							1	2,223	29	11
					9	17,730	249							12
								9	1,317	44				13
								23	13,670	404	1	9	3	14
					3	854	63							15
														16
								3	775	18	25	31,020	576	17
10	22,093	4,101		285				48	33,828	751	22	40,564	566	18
											1	993	20	19
19	434			115				18	995	103	65	1,988	258	20
2	3,177	3,051		40	2	3,455	55				4	5,160	96	21
76	2,228	124		206				262	25,229	1,948	331	15,274	1,048	22
					20	2,576	360	82	11,861	1,584	33	1,800	286	23
														24
11	13,581	17,643		217	1	66	5	1	95	5	3	3,069	58	25
1	1,743	2,200		26	3	6,506	68				4	3,795	81	26
4	4,234	4,761		82	7	21,349	253	110	37,063	725	88	77,718	802	27
								2	30	5	1	15	2	28
											27	24,531	544	29
2	2,867	4,784		50										30
								1	95	3	25	464	77	31
								2	198	10				32
								11	540	40	22	389	55	33
					3	8,955	101				16	62,214	570	34
											10	160	30	35
2	3,874	1,600	9,000	51	12	24,348	804	2	213	12	3	2,636	65	36
1	993	2,500		19	9	3,406	86	4	193	18	6	5,562	118	37
								7	100	23	12	263	97	38
					1	223	14				2	2,285	44	39
322	1,424,843	299,689		43,982	40	25,438	1,632	46	5,823	326	118	101,982	5,879	40
														41
											15	10,899	247	42
								3	30	10	21	411	162	43
											1	160	5	44
1	198	295		4				1	214	6				45
18	3,765	2,969		150	1	6,919	75	44	2,222	235	482	25,760	3,077	46
1	1,345	2,761		21	1	352	10							47
								1	26	3				48
								119	32,893	723	55	47,218	1,482	49
1	18	5		10				6	1,882	32				50
														51
35	2,213	2,790		588	1	123	3	42	2,300	305	8	5,903	111	52
								3	102	20	2	86	28	53
10	135	18		20				548	9,064	1,324	257	2,362	514	54
65	4,342	1,151		898	7	4,642	99	15	13,988	233	39	3,812	399	55
								2	82	34	36	2,153	799	56
1	13	5		8	9	645	54	35	3,311	428	3	723	32	57
														58
											2	732	13	59
								11	837	74				60
								3	763	17	2	1,386	28	61
					19	974	83	1	84	5				62
233	659,435	820,489	18,723	8,223	166	517,047	6,071	5	4,669	166	180	526,675	5,893	63
								1	17	6				64
3	2,538	355		80	4	13,084	172	29	6,784	258	198	115,092	2,091	65
8	16,949	3,608		225	67	220,750	2,963	18	7,925	152	110	352,330	3,857	66
1	1,283	2,730		27				1	12	5				67
9	115	158		19				151	14,082	1,057	48	347	98	68
					373	74,264	3,531	130	63,262	2,465	259	84,688	9,684	69
27	54,753	2,269		763	13	49,980	671	11	15,292	276	11	10,265	294	70
					1	1,698	25	44	12,295	246	51	25,946	732	71
1	343	606		7							1	1,141	23	72

No. 4.—STATEMENT of Vessels, British, Canadian and Foreign entered Inwards *from Sea*, at each Port and Outport—*Concluded*

No.	Ports and Outports — Ports et ports secondaires	With Cargoes—Chargés									
		British—Britanniques					Canadian—Canadiens				
		Vessels — Navires	Tons register — Tonnage enregistré	Freight, Tons weight — Poids du fret en tonnes	Freight, Tons, measurement — Mesurage du fret en tonnes	Crew — Equipage	Vessels — Navires	Tons register — Tonnage enregistré	Feight Tons weight — Poids du fret en tonnes	Freight, Tons, measurement — Mesurage du fret en tonnes	Crew — Equipage
73	Pictou, N.S.	1	1,305	1,530	.....	23	.....	.....	.....	.....	.....
74	Port Alberni, B.C.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
75	Port Alfred, Que.	11	22,382	47,584	.....	302	21	22,087	45,850	.....	420
76	Port Clyde, N.S.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
77	Port Elgin, N.B.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
78	Port Hastings, N.S.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
79	Port Hawkesbury, N.S.	.....	.....	.....	.....	.....	17	2,550	503	.....	342
80	Port La Tour, N.S.	.....	.....	.....	.....	.....	2	28	58	.....	7
81	Port Mulgrave, N.S.	.....	.....	.....	.....	.....	1	2,192	3,000	.....	58
82	Port Wade, N.S.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
83	Powell River, B.C.	.....	.....	.....	.....	.....	33	14,493	3,174	40	578
84	Prince Rupert, B.C.	1	83	4	.....	17	1,030	66,374	4,826	.....	6,695
85	Quatsino, B.C.	.....	.....	.....	.....	.....	24	16,977	13,967	.....	517
86	Quebec, Que.	306	2,142,042	137,476	26,508	71,976	61	130,296	29,440	10	2,250
87	Richibucto, N.B.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
88	Rimouski, Que.	4	49,054	171	.....	1,906	1	1,204	160	.....	20
89	Riverport, N.S.	.....	.....	.....	.....	.....	48	5,455	4,645	.....	918
90	St. Andrews, N.B.	.....	.....	.....	.....	.....	252	3,033	282	.....	624
91	St. George, N.B.	.....	.....	.....	.....	.....	4	8	4	.....	8
92	St. John, N.B.	123	641,339	131,249	34,993	15,219	197	192,790	110,702	78	4,836
93	St. Peter, N.S.	2	958	50	.....	21	.....	.....	.....	.....	.....
94	St. Stephen, N.B.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
95	Salmon River, N.S.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
96	Sandy Point, N.S.	.....	.....	.....	.....	.....	4	676	917	.....	33
97	Sheet Harbor, N.S.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
98	Shelburne, N.S.	1	97	100	.....	7	4	140	21	.....	36
99	Sherbrooke, N.S.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
100	Shippegan, N.B.	.....	.....	.....	.....	.....	25	336	962	.....	103
101	Sidney, B.C.	.....	.....	.....	.....	.....	14	6,498	1,185	.....	215
102	Sorel, Que.	3	7,543	9,676	6,100	96	.....	.....	.....	.....	.....
103	Souris, P.E.I.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
104	Steveston, B.C.	.....	.....	.....	.....	.....	3	241	151	.....	22
105	Stewart, B.C.	.....	.....	.....	.....	.....	4	18	157	.....	7
106	Summerside, P.E.I.	2	880	1,496	.....	13	3	1,586	2,641	.....	20
107	Sydney, N.S.	28	56,549	95,409	.....	759	19	33,209	49,107	.....	591
108	Three Rivers, Que.	11	22,188	30,047	.....	295	5	15,418	3,820	.....	131
109	Truro, N.S.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
110	Union Bay, B.C.	.....	.....	.....	.....	.....	1	272	123	.....	8
111	Vancouver, B.C.	124	661,188	177,811	75,277	13,841	755	1,151,992	407,384	12,770	49,708
112	Victoria, B.C.	78	304,071	1,460	1,195	9,215	554	964,810	12,403	256	43,628
113	Westport, N.S.	.....	.....	.....	.....	.....	5	159	17	.....	15
114	Weymouth, N.S.	.....	.....	.....	.....	.....	5	882	323	36	23
115	White Rock, B.C.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
116	Windsor, N.S.	16	31,511	409	.....	401	12	6,774	13,479	.....	117
117	Wolfeville, N.S.	.....	.....	.....	.....	.....	6	1,219	2,046	.....	31
118	Yarmouth, N.S.	.....	.....	.....	.....	.....	84	38,826	10,791	.....	3,117
119	York Factory, Man.	1	1,115	739	.....	32	.....	.....	.....	.....	.....
	Total	1,802	8,504,229	1,721,394	292,701	238,534	4,914	3,702,952	1,584,531	15,040	144,063

N° 4.—ÉTAT des long-courriers britanniques, canadiens et étrangers déclarés à l'entrée à chaque port et port secondaire—*Fin*

Foreign—Étrangers					In Ballast—Sur lest									
					British — Britanniques			Canadian — Canadiens			Foreign — Étrangers			
Vessels — Navires	Tons register — Tonnage enregistré	Freight, tons, weight — Poids du fret en tonnes	Freight, Tons measurement — Mesurage du fret en tonnes	Crew — Equipage	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Equipage	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Equipage	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Equipage	No.
2	2,574	5,267	.....	44	4	4,497	87	.....	.....	.....	4	3,840	69	73
4	1,027	1,278	.....	32	3	9,300	128	5	142	33	22	57,060	678	74
26	57,933	107,493	.....	739	.....	.....	.....	.....	.....	.....	2	2,161	41	75
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1,641	23	76
.....	.....	.....	.....	.....	2	20	8	.....	.....	.....	.....	.....	.....	77
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	744	16	78
1	2,546	5,663	.....	36	13	1,232	78	13	1,751	163	5	3,874	72	79
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	80
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	81
.....	.....	.....	.....	.....	.....	.....	.....	2	190	8	.....	.....	.....	82
50	49,450	18,763	.....	1,299	14	53,094	677	28	5,169	278	61	102,526	1,453	83
1,273	53,560	13,818	.....	8,254	12	33,584	375	112	80,914	3,992	160	26,320	896	84
4	7,721	8,336	.....	112	.....	.....	.....	.....	.....	.....	18	29,254	332	85
71	203,479	98,224	336	3,062	16	49,703	943	2	4,541	73	18	57,874	1,328	86
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	815	22	87
2	2,458	202	.....	46	4	6,466	101	.....	.....	.....	1	899	20	88
.....	.....	.....	.....	.....	.....	.....	.....	9	502	138	.....	.....	.....	89
313	6,386	9,331	.....	740	.....	.....	.....	621	34,760	2,923	293	3,573	639	90
2	160	128	.....	6	.....	.....	.....	27	5,473	244	38	664	107	91
145	285,296	145,099	913	6,777	52	136,477	2,049	83	30,583	595	582	172,835	3,449	92
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	93
5	3,169	7,114	.....	54	.....	.....	.....	7	84	14	2	51	7	94
.....	.....	.....	.....	.....	.....	.....	.....	1	480	10	.....	.....	.....	95
55	3,680	1,224	.....	1,127	.....	.....	.....	3	466	19	36	3,382	760	96
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	8	7,227	156	97
50	3,612	1,008	.....	1,044	.....	.....	.....	3	404	22	39	2,459	738	98
.....	.....	.....	.....	.....	.....	.....	.....	2	565	12	4	2,780	67	99
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	100
9	13,005	11,883	.....	169	.....	.....	.....	79	13,420	500	501	153,613	7,325	101
5	14,854	17,992	.....	189	.....	.....	.....	.....	.....	.....	.....	.....	.....	102
2	1,211	2,973	.....	29	1	64	4	2	168	12	.....	.....	.....	103
.....	.....	.....	.....	.....	.....	.....	.....	20	553	74	2	42	6	104
4	1,916	190	.....	72	.....	.....	.....	72	49,418	2,565	4	4,365	58	105
4	5,034	13,342	.....	93	1	1,305	23	.....	.....	.....	1	1,475	21	106
129	309,907	917,066	.....	4,140	63	120,677	1,747	16	13,105	317	47	38,455	963	107
16	38,032	59,570	.....	510	12	47,303	569	8	22,568	248	8	18,490	223	108
.....	.....	.....	.....	.....	.....	.....	.....	1	140	5	.....	.....	.....	109
15	700	49	.....	85	12	37,393	505	9	1,387	76	26	8,558	232	110
523	1,614,521	814,681	13,329	20,424	280	999,115	12,114	381	195,590	7,442	537	1,427,779	17,817	111
532	1,216,179	17,017	15,901	38,946	27	69,772	1,003	537	135,700	5,339	794	1,178,669	35,155	112
.....	.....	.....	.....	.....	.....	.....	.....	6	303	20	19	223	52	113
.....	.....	.....	.....	.....	.....	.....	.....	15	2,688	89	7	927	40	114
.....	.....	.....	.....	.....	.....	.....	.....	4	172	21	.....	.....	.....	115
6	5,436	5,745	.....	122	83	160,227	2,055	9	2,829	60	60	52,722	1,027	116
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	117
146	381,874	10,190	.....	21,759	.....	.....	.....	31	1,997	258	100	7,284	1,088	118
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	119
4,293	6,524,937	3,483,262	58,202	166,338	1,372	2,735,686	39,918	4,017	954,115	40,776	6,133	5,042,239	116,764	

No. 5.—Statement of Vessels, British, Canadian and Foreign, entered Inwards *from Sea*

ABSTRACT BY COUNTRIES

No.	Ports and Outports — Ports et ports secondaires	With Cargoes—Chargés									
		British—Britanniques					Canadian—Canadiens				
		Vessels — Navires	Tons register — Tonnage enregistré	Freight, Tons weight — Poids du fret en tonnes	Freight, Tons, measurement — Mesurage du fret en tonnes	Crew — Equipage	Vessels — Navires	Tons register — Tonnage enregistré	Feight Tons weight — Poids du fret en tonnes	Freight, Tons, measurement — Mesurage du fret en tonnes	Crew — Equipage
1	Great Britain	893	5,356,054	753,129	183,176	157,583	38	95,468	46,522	.....	1,311
2	Australia	36	262,164	33,476	22,583	7,489	26	91,818	16,262	.....	1,093
3	British East Africa	1	1,914	3,320	.....	31	.....	.....	.....	.....	.....
4	British South Africa	13	43,246	78,569	.....	537	.....	.....	.....	.....	.....
5	British Honduras	.....	.....	.....	.....	.....	1	2,192	3,000	.....	58
6	British India	23	80,482	36,600	.....	645	.....	.....	.....	.....	.....
7	British West Indies	16	21,413	49,544	.....	336	167	327,529	154,580	528	6,542
8	British Oceania	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
9	British Straits Settlements	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
10	Ceylon	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
11	Fiji Islands	8	28,447	56,457	272	384	.....	.....	.....	.....	.....
12	Gibraltar	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
13	Hong Kong	16	110,873	15,639	9,524	2,141	2	17,672	3,711	.....	1,091
14	Irish Free State	1	2,708	7,014	.....	38	.....	.....	.....	.....	.....
15	Newfoundland	317	396,844	51,274	1	12,522	145	130,630	56,666	12	4,460
16	New Zealand	8	59,843	8,134	432	1,761	7	23,042	857	.....	286
17	Argentina	14	39,429	76,948	.....	469	7	24,200	15,807	.....	292
18	Azores and Madeira	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
19	Belgium	65	531,226	65,760	24,614	17,102	54	181,316	118,329	10	2,272
20	Brazil	.....	.....	.....	.....	.....	3	10,433	6,326	.....	126
21	Canary Islands	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
22	Chile	2	6,270	8,760	.....	72	.....	.....	.....	.....	.....
23	China	12	90,948	391	241	2,205	4	35,344	277	156	2,169
24	Colombia	4	22,247	49,000	.....	157	17	109,726	250,073	.....	710
25	Costa Rica	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
26	Cuba	4	9,955	21,559	.....	127	.....	.....	.....	.....	.....
27	Denmark	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
28	Dutch Guiana	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
29	Dutch East Indies	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
30	Dutch West Indies	1	4,328	2,200	.....	54	1	6,845	15,000	.....	44
31	Egypt	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
32	France	9	54,123	13,245	3,387	655	.....	.....	.....	.....	.....
33	French Africa	2	5,540	5,693	.....	68	.....	.....	.....	.....	.....
34	Germany	38	239,378	33,271	19,253	6,485	.....	.....	.....	.....	.....
35	Greece	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
36	Greenland	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
37	Hawaii	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
38	Hayti	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
39	Italy	2	6,514	2,172	795	88	.....	.....	.....	.....	.....
40	Japan	15	140,960	11,522	21,713	5,647	18	159,048	23,028	12,736	9,877
41	Jugo-Slavia	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
42	Mexico	.....	.....	.....	.....	.....	4	16,931	36,023	.....	141
43	Miquelon and St. Pierre	1	926	400	.....	18	10	6,980	296	.....	254
44	Netherlands	19	95,105	13,896	422	1,143	.....	.....	.....	.....	.....
45	Norway	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
46	Peru	9	41,892	91,000	.....	343	16	97,440	147,644	.....	538
47	Poland	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
48	Porto Rico	1	1,428	4,070	.....	27	.....	.....	.....	.....	.....
49	Portugal	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
50	Russia	2	4,544	5,904	.....	65	.....	.....	.....	.....	.....
51	San Domingo	3	5,640	24,774	.....	86	.....	.....	.....	.....	.....
52	Spain	5	8,573	17,800	.....	129	.....	.....	.....	.....	.....
53	Sweden	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
54	Turkey	1	3,257	230	.....	44	.....	.....	.....	.....	.....
55	United States	216	815,139	163,412	6,288	19,318	2,231	2,268,232	629,848	1,148	93,826
56	Uruguay	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
57	Venezuela	2	8,414	15,032	.....	95	.....	.....	.....	.....	.....
58	From Sea	.....	.....	.....	.....	.....	27	967	117	450	87
59	Sea Fisheries	43	4,405	1,199	.....	670	2,136	97,139	60,165	.....	18,986
	Total	1,802	8,504,229	1,721,394	292,701	238,534	4,914	3,702,952	1,584,531	15,040	144,063

N° 5.—ÉTAT des long-courriers britanniques, canadiens et étrangers, déclarés à l'entrée

RELEVE PAR PAYS

Foreign—Étrangers					In Ballast—Sur lest									
					British — Britanniques			Canadian — Canadiens			Foreign — Étrangers			
Vessels — Navires	Tons register — Tonnage enregistré	Freight, Tons weight — Poids du fret en tonnes	Freight, Tons measurement — Mesurage du fret en tonnes	Crew — Equipage	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Equipage	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Equipage	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Equipage	No.
112	192,861	294,163	68	2,880	300	980,323	11,940	14	50,187	635	38	94,510	1,184	1
					15	56,183	711							2
														3
5	12,588	27,712		162	7	22,635	278				1	3,078	35	4
														5
3	10,821	300		135										6
93	112,979	104,529		2,261	2	314	27	6	1,014	46	3	3,859	52	7
					1	3,525	48				1	3,752	45	8
					1	3,136	32							9
					1	3,136	33							10
														11
					1	2,337	32				4	13,445	143	12
														13
					2	5,745	76				1	2,293	29	14
89	272,265	822,430	9,000	3,109	376	115,064	3,995	136	64,180	2,339	71	63,953	1,347	15
1	3,339	17		37	2	4,544	58							16
23	69,146	41,346		717							5	14,965	153	17
					1	2,708	38				1	1,292	24	18
56	210,679	60,433		2,195	9	29,736	375	2	1,090	39	5	15,418	173	19
2	4,968	195		54							1	2,485	28	20
					1	2,271	28							21
6	20,296	17,298		226	1	3,150	62				1	3,151	29	22
41	216,237	13,092	10,008	3,902	15	62,136	793				16	56,855	538	23
20	108,957	267,708		791										24
					2	4,700	60							25
12	18,114	33,708		276	1	3,154	38	1	238	6	3	3,385	111	26
63	324,365	9,254		10,984							2	5,494	68	27
10	15,635	25,111		251										28
					2	5,478	69							29
6	32,337	67,128		239										30
					8	25,626	270				1	3,296	40	31
65	228,056	51,643	1,534	4,582	9	29,447	331				6	18,245	193	32
2	6,903	2,439		72	24	77,872	848				7	22,922	244	33
127	575,309	70,289	18,398	12,639	3	10,772	125				15	47,681	637	34
1	3,145	6,160		37	1	175	21				10	28,344	344	35
1	943	2,500		19										36
											1	3,446	35	37
1	673	1,603		16										38
42	158,422	27,414		1,780	46	151,405	1,542				45	145,043	1,551	39
108	557,440	14,241	17,484	10,952	54	185,449	2,380	2	8,373	114	235	878,451	9,682	40
					1	3,002	35							41
2	5,383	11,978		72	2	11,799	160	9	294	78				42
9	4,479	1,471		325	38	3,602	294	152	13,614	1,197	79	25,315	2,584	43
72	364,515	54,833	40	7,537	18	44,712	645				57	185,518	1,911	44
36	180,933	51,300	–	5,256							7	16,040	231	45
6	19,706	21,612		206	1	2,698	35							46
1	3,819			184							1	4,416	48	47
														48
1	3,214	1,403		32	6	17,770	214	1	376	7	6	14,673	176	49
					2	5,131	67				2	6,732	164	50
5	4,969	12,737	–	106										51
9	19,983	7,293	–	338	2	5,395	65				6	8,714	144	52
43	261,211	24,973	–	6,954							1	3,515	35	53
1,744	2,443,729	1,306,535	1,670	75,084	299	823,497	11,359	3,424	797,075	33,450	4,933	3,239,876	80,819	55
1	2,327	99	–	26										56
2	7,474	12,021		92										57
					19	19,688	1,374	41	1,493	215	68	20,724	1,206	58
1,473	46,717	16,294		11,810	99	7,371	1,460	223	16,181	2,650	500	81,353	12,760	59
4,293	6,524,937	3,483,262	58,202	166,338	1,372	2,735,686	39,918	4,017	954,115	40,776	6,133	5,042,239	116,764	

No. 5.—Statement of Vessels, British, Canadian and Foreign, entered inwards *from Sea—Concluded*

RECAPITULATION

With cargo — Chargés	Vessels — Navires	Tons Register — Tonnage enregistré	Freight, tons Weight — Poids du fret en tonnes	Freight, tons Measurement — Mesurage du fret en tonnes	Crew — Equipage
British—Britanniques	1,802	8,504,229	1,721,394	292,701	238,534
Canadian—Canadiens	4,914	3,702,952	1,584,531	15,040	144,063
Foreign—Étrangers	4,293	6,524,937	3,483,262	58,202	166,338
Total	11,009	18,732,118	6,789,187	365,943	548,935

N° 5.—ÉTAT des long-courriers britanniques, canadiens et étrangers, déclarés, à l'entrée—*fin*

RÉCAPITULATION

In Ballast — Sur lest	Vessels — Navires	Tons Register — Tonnage enregistré	Freight, tons Weight — Poids du fret en tonnes	Freight, tons Measurement — Mesurage du fret en tonnes	Crew — Equipage
British—Britanniques	1,372	2,735,686	.....	.....	39,918
Canadian—Canadiens	4,017	954,115	.....	.....	40,776
Foreign—Étrangers	6,133	5,042,239	.....	.....	116,764
Total	11,522	8,732,040	.....	.....	197,458
Grand total	22,531	27,464,158	6,789,187	365,943	746,393

No. 6.—Statement of Vessels, British, Canadian and Foreign, entered Outwards *for Sea* at each Port and Outport

No.	Ports and Outports — Ports et ports secondaires	With Cargoes—Chargés									
		British—Britanniques					Canadian—Canadiens				
		Vessels — Navires	Tons register — Tonnage enregistré	Freight, Tons weight — Poids du fret en tonnes	Freight, Tons, measurement — Mesurage du fret en tonnes	Crew — Équipage	Vesels — Navires	Tons register — Tonnage enregistré	Feight Tons weight — Poids du fret en tonnes	Freight, Tons, measurement — Mesurage du fret en tonnes	Crew — Équipage
1	Albert, N.B.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
2	Alert Bay, B.C.	.....	.....	.....	.....	.....	1	1,238	150	.....	24
3	Amherst, N.S.	1	223	600	.....	11	2	216	405	.....	12
4	Annapolis Royal, N.S.	.....	.....	.....	.....	.....	10	1,001	1,780	2,140	31
5	Antigonish, N.S.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
6	Anyox, B.C.	.....	.....	.....	.....	.....	39	55,010	118,278	.....	928
7	Arichat, N.S.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
8	Baddeck, N.S.	2	880	.....	1,500	14	2	491	.....	500	13
9	Bamfield, B.C.	.....	.....	.....	.....	.....	6	2,619	1,074	.....	68
10	Barrington Passage, N.S.	.....	.....	.....	.....	.....	1	32	58	.....	4
11	Bathurst, N.B.	58	894	760	.....	162	3	934	.....	1,736	20
12	Belliveau's Cove, N.S.	.....	.....	.....	.....	.....	20	2,695	17	6,272	84
13	Bear River, N.S.	10	19,700	54,200	.....	274	1	80	.....	200	4
14	Blubber Bay, B.C.	.....	.....	.....	.....	.....	99	26,602	23,845	.....	1,190
15	Bonne Esperance, Que.	12	4,455	346	.....	314	.....	.....	.....	.....	.....
16	Bridgewater, N.S.	6	1,473	1,840	.....	33	16	5,803	9,217	.....	99
17	Britannia Beach, B.C.	.....	.....	.....	.....	.....	62	58,033	100,512	.....	1,183
18	Buctouche, N.B.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
19	Butedale, B.C.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
20	Campbellton, N.B.	3	5,461	.....	8,585	63	3	988	.....	745	19
21	Campobello, N.B.	.....	.....	.....	.....	.....	30	292	118	.....	55
22	Canso, N.S.	.....	.....	.....	.....	.....	9	4,574	6,656	91	89
23	Caraquet, N.B.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
24	Charlottetwon, P.E.I.	20	27,670	2,137	.....	928	23	15,747	3,043	87	410
25	Chatham, N.B.	3	5,363	.....	10,339	80	1	939	.....	273	5
26	Chemainus, B.C.	22	67,173	850	32,495	819	38	33,513	33,264	45,030	41
27	Chester, N.S.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
28	Cheticamp, N.S.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
29	Clark's Harbour, N.S.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
30	Clementsport, N.S.	.....	.....	.....	.....	.....	4	396	445	475	20
31	Digby, N.S.	.....	.....	.....	.....	.....	17	936	1,845	.....	55
32	Englewood, B.C.	3	8,955	14,584	.....	101	1	4,848	8,060	.....	69
33	Freeport, N.S.	.....	.....	.....	.....	.....	6	276	619	.....	30
34	Gaspe, Que.	1	840	.....	1,000	20	6	2,884	1,010	7,000	67
35	Georgetown, P.E.I.	10	3,385	1,887	.....	88	5	2,774	3,323	.....	50
36	Glace Bay, N.S.	.....	.....	.....	.....	.....	7	235	5	.....	25
37	Guysboro, N.S.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
38	Halifax, N.S.	495	2,070,072	156,157	21,530	58,879	653	379,998	225,262	18,830	13,959
39	Havre St. Pierre, Que.	.....	.....	.....	.....	.....	10	8,500	4,300	.....	430
40	Hillsboro, N.B.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
41	Isaac's Harbour, N.S.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
42	Joggins Mines, N.S.	.....	.....	.....	.....	.....	1	340	450	500	6
43	Kentville, N.S.	.....	.....	.....	.....	.....	1	214	.....	17	6
44	Kildonan, B.C.	2	13,838	894	1,200	170	13	8,224	4,951	.....	221
45	Ladner, B.C.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
46	Ladysmith, B.C.	.....	.....	.....	.....	.....	95	22,934	36,637	.....	184
47	La Have, N.S.	2	595	550	.....	13	9	2,391	3,325	.....	54
48	Levis, Que.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
49	Liverpool, N.S.	.....	.....	.....	.....	.....	56	1,667	2,880	.....	365
50	Lockeport, N.S.	.....	.....	.....	.....	.....	18	798	537	.....	235
51	Lord's Cove, N.B.	.....	.....	.....	.....	.....	181	1,175	2,949	.....	358
52	Louisburg, N.S.	11	14,354	15,135	.....	323	10	16,521	18,829	.....	236
53	Lower East Pubnico, N.S.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
54	Lunenburg, N.S.	2	376	400	.....	15	17	3,180	3,220	.....	120
55	Mabou, N.S.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
56	Mahone Bay, N.S.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
57	Maitland, N.S.	.....	.....	.....	.....	.....	1	425	800	.....	7
58	Meteghan River, N.S.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
59	Middleton, N.S.	.....	.....	.....	.....	.....	1	480	642	.....	8
60	Montague, P.E.I.	25	1,305	1,491	.....	111	5	389	444	.....	26
61	Moncton, N.B.	.....	.....	.....	.....	.....	4	884	1,624	.....	21
62	Montreal, Que.	654	3,002,635	3,361,253	322,767	71,557	125	288,636	409,314	.....	4,773
63	Murray Harbour, P.E.I.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
64	Nanaimo, B.C.	22	75,495	5,720	26,350	882	42	28,857	9,014	767	752
65	New Campbellton, N.S.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
66	Newcastle, N.B.	4	6,891	.....	13,782	101	4	2,386	.....	4,772	28
67	New Westminster, B.C.	66	215,698	123,489	.....	2,861	15	6,822	4,852	.....	127
68	North East Harbour, N.S.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
69	North Head, N.S.	.....	.....	.....	.....	.....	172	17,476	1,418	.....	1,260
70	North Sydney, N.S.	396	222,311	74,829	.....	7,711	65	24,878	33,184	.....	785

N° 6.—Tableau des navires britanniques, canadiens et étrangers *allant à la mer*, entrés à chaque port ou port secondaire

Foreign—Étrangers					In Ballast—Sur lest									
					British — Britanniques			Canadian — Canadiens			Foreign — Étrangers			
Vessels — Navires	Tons register — Tonnage enregistré	Freight. Tons weight — Poids du fret en tonnes	Freight. Tons measurement — Mesurage du fret en tonnes	Crew — Equipage	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Equipage	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Equipage	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Equipage	No.
2	699			11										1
1	3,450	7,800		34				20	451	89	54	1,097	273	2
														3
														4
1	671		150	17										5
								20	24,466	1,240	3	5,779	64	6
14	302	56		109				21	369	113	5	385	36	7
33	45,455		3,950	364	16	407	112	17	357	179				8
5	233	147		25				19	1,609	73	45	285	91	9
1	59	2		22				5	74	27	4	146	39	10
1	2,233		5,408	54							4	5,261	64	11
											1	26	3	12
								1	888	14				13
								9	6,807	160	1	9	3	14
					5	2,100	150							15
28	33,550	76,020		628										16
26	53,394	86,433		716				20	12,148	277	6	9,263	133	17
3	2,656		3,471	56										18
								40	640	176	84	2,422	273	19
9	11,496	3,073		200										20
52	606	549		104				319	28,575	2,059	354	10,544	978	21
					15	1,935	262	75	10,802	1,461	31	676	259	22
								105	1,886	590				23
10	9,638	6,191		174										24
10	15,142		25,773	238										25
87	178,334	41,300	126,553	1,799				86	5,557	733	45	3,501	357	26
								31	438	106				27
27	24,511	62,329		544										28
20	314	163		59				12	108	55				29
														30
22	302	328		61				1	57	9	4	131	18	31
16	61,924	75,488		572										32
10	140	72		30										33
9	12,053		16,000	214	16	27,543	880							34
11	11,936	14,497		235				6	181	27	1	681	17	35
12	263	30		97				28	750	72				36
13	11,429	23,809		259										37
427	1,550,875	92,677	11,700	50,139	26	37,820	514	68	126,712	1,272	24	58,021	633	38
														39
16	11,672	32,967		366										40
8	120	80		24				3	30	9	21	411	162	41
1	160	250	250	5										42
														43
480	49,870	8,160	8,604	3,332										44
								67	2,712	307	6	1,253	69	44
41	41,304	13,452		1,330				2	52	9				45
1	28	5		10				66	3,806	537	12	1,749	67	46
					3	13,242	107	34	2,681	644				47
														48
46	12,715	16,518		774				39	2,338	318	2	96	17	49
5	116	55		33										50
158	1,505	2,307		336				401	9,208	1,098	83	992	164	51
65	9,841	8,249		735	2	272	34	11	495	152	38	2,985	382	52
1	13	5		8				2	82	34	36	2,153	799	53
1	960	2,000		19	15	1,846	94	292	25,388	4,841	2	94	26	54
														55
								2	195	40				56
														57
								4	538	27				58
														59
														60
4	3,339	7,150		54										61
386	1,051,098	2,304,462	5,008	13,350	14	53,459	642	17	307,917	717	44	198,832	1,542	62
								1	17	6				63
143	175,291	48,205	36,002	2,603				45	9,023	438	83	2,459	375	64
					1	19	3							65
3	2,466		4,932	48										66
105	343,167	196,160		3,753	2	6,665	109	20	4,956	143	12	23,704	308	67
								1	12	5	1	1,283	38	68
41	374	385		80				45	11,907	818	12	130	28	69
28	16,825	42,864		479	120	42,097	2,138	49	32,095	1,437	248	76,556	9,781	70

No. 6.—STATEMENT of Vessels, British, Canadian and Foreign, entered Outwards *for Sea* at each Port and Outport—*Concluded*

No.	Ports and Outports — Ports et ports secondaires	With Cargoes—Chargés									
		British—Britanniques					Canadian—Canadiens				
		Vessels — Navires	Tons register — Tonnage enregistré	Freight, Tons weight — Poids du fret en tonnes	Freight, Tons, measurement — Mesurage du fret en tonnes	Crew — Équipage	Vessels — Navires	Tons register — Tonnage enregistré	Feight Tons weight — Poids du fret en tonnes	Freight, Tons, measurement — Mesurage du fret en tonnes	Crew — Équipage
71	Ocean Falls, B.C.	16	61,572	19,728	.....	817	14	20,368	19,325	.....	358
72	Parrsboro, N.S.	1	1,698	2,547	.....	25	67	19,043	28,565	.....	389
73	Pictou, N.S.	6	4,796	8,331	.....	101	1	95	28	.....	7
74	Pointe au Pic, Que.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
75	Port Alberni, B.C.	8	24,863	.....	19,718	309	2	4,796	1,215	2,246	68
76	Port Alfred, Que.	4	8,218	17,164	.....	105	.....	.....	.....	.....	.....
77	Port Clyde, N.S.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
78	Port Hawkesbury, N.S.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
79	Port La Tour, N.S.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
80	Port Mulgrave, N.S.	.....	.....	.....	.....	.....	2	2,473	1,883	.....	28
81	Port Wade, N.S.	.....	.....	.....	.....	.....	6	299	525	565	20
82	Port Williams, N.S.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
83	Powell River, B.C.	14	53,094	9,950	.....	677	38	21,457	10,141	.....	597
84	Prince Rupert, B.C.	13	36,762	102,199	.....	410	70	98,332	5,637	.....	4,374
85	Quatsino, B.C.	.....	.....	.....	.....	.....	2	1,082	190	.....	43
86	Quebec, Que.	136	751,560	248,337	1,278	23,229	37	79,537	18,785	47	1,488
87	Richibucto, N.S.	.....	.....	.....	.....	.....	3	2,361	.....	5,271	23
88	Rimouski, Que.	6	10,254	9,558	.....	154	54	58,559	100,650	.....	1,083
89	Riverport, N.S.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
90	Sandy Cove, N.S.	.....	.....	.....	.....	.....	2	69	100	.....	6
91	Sandy Point, N.S.	1	99	175	.....	6	5	1,471	1,313	.....	31
92	Sheet Harbour, N.S.	.....	.....	.....	.....	.....	2	25	.....	.....	7
93	Shelburne, N.S.	2	208	275	.....	13	8	1,708	1,190	.....	68
94	Sherbrooke, N.S.	1	892	1,665	.....	18	3	1,541	2,620	83	32
95	Shippegan, N.B.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
96	Sidney, B.C.	.....	.....	.....	.....	.....	27	2,532	3,470	.....	168
97	Sorel, Que.	6	4,586	1,383	.....	101	7	4,578	1,154	.....	138
98	Souris, P.E.I.	1	64	67	.....	4	4	1,956	191	60	33
99	Steveston, B.C.	.....	.....	.....	.....	.....	16	433	371	.....	58
100	Stewart, B.C.	.....	.....	.....	.....	.....	3	4,208	357	.....	72
101	St. Andrews, N.B.	.....	.....	.....	.....	.....	194	1,644	1,553	.....	376
102	St. George, N.B.	.....	.....	.....	.....	.....	26	5,493	166	14,720	253
103	St. John, N.B.	130	619,760	547,371	74,357	14,482	117	68,905	61,919	41,553	2,383
104	St. Peters, N.S.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
105	St. Stephen, N.B.	.....	.....	.....	.....	.....	2	22	16	456	4
106	Summerside, P.E.I.	3	4,775	6,581	.....	82	2	640	669	.....	22
107	Sydney, N.S.	138	323,701	609,394	.....	4,344	20	21,397	36,078	.....	394
108	Three Rivers, Que.	7	35,919	8,297	.....	476	6	22,004	21,029	.....	192
109	Truro, N.S.	.....	.....	.....	.....	.....	4	1,331	321	.....	23
110	Union Bay, B.C.	48	155,537	40,705	.....	2,046	11	19,010	6,087	.....	325
111	Vancouver, B.C.	389	1,584,668	1,861,275	43,990	24,446	553	1,084,734	104,046	30,848	47,689
112	Victoria, B.C.	34	200,487	21,001	97	5,528	561	534,413	100,750	 49	25,526
113	Victoria, P.E.I.	1	125	216	.....	11	.....	.....	.....	.....	.....
114	Westport, N.S.	.....	.....	.....	.....	.....	2	79	57	.....	6
115	White Rock, B.C.	.....	.....	.....	.....	.....	1	39	18	.....	7
116	Windsor, N.S.	97	189,873	520,350	.....	2,451	34	13,542	17,332	6,220	250
117	Weymouth, N.S.	1	926	1,670	.....	19	24	5,246	22	13,100	128
118	Yarmouth, N.S.	.....	.....	.....	.....	.....	44	32,536	3,250	.....	2,528
119	York Factory, Man.	1	1,115	351	.....	32	.....	.....	.....	.....	.....
	Total	2,894	9,845,594	7,855,712	578,988	225,416	3,884	3,178,289	1,629,379	204,653	117,753

N° 6.—TABLEAU des navires britanniques, canadiens et étrangers *allant à la mer*, entrés à chaque port ou port secondaire—*Fin*

Foreign—Étrangers					In Ballast—Sur lest									No.
					British — Britanniques			Canadian — Canadiens			Foreign — Étrangers			
Vessels — Navires	Tons register — Tonnage enregistré	Freight, Tons weight — Poids du fret en tonnes	Freight, Tons measurement — Mesurage du fret en tonnes	Crew — Équipage	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Équipage	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Équipage	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Équipage	
33	61,311	41,000	.....	989	.....	.....	.....	19	28,380	475	5	3,708	66	71
56	29,243	43,866	.....	801	.....	.....	.....	.....	.....	.....	.....	.....	.....	72
9	9,542	7,624	.....	173	.....	.....	.....	.....	.....	.....	.....	.....	.....	73
2	1,368	3,384	.....	33	.....	.....	.....	.....	.....	.....	.....	.....	.....	74
44	136,956	.....	139,723	1,583	.....	.....	.....	5	5,455	81	2	31	7	75
9	12,015	.....	25,812	224	1	 3,510	45	.....	.....	.....	.....	.....	.....	76
1	1,641	560	.....	23	.....	.....	.....	.....	.....	.....	.....	.....	.....	77
4	4,848	5,663	228	93	4	329	32	24	3,723	466	6	4,925	96	78
.....	.....	.....	.....	.....	.....	.....	.....	2	28	7	.....	.....	.....	79
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	80
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	81
2	1,876	1,067	.....	36	.....	.....	.....	.....	.....	.....	.....	.....	.....	82
90	139,210	59,054	240	2,542	.....	.....	.....	14	3,150	187	23	13,449	239	83
58	28,502	37,214	.....	721	1	37	11	1,153	107,873	8,575	1,368	53,062	8,580	84
21	40,285	26,922	.....	425	.....	.....	.....	1	11	2	3	5,500	74	85
74	219,503	169,696	.....	3,159	16	38,919	1,554	4	24,894	179	6	18,956	1,017	86
5	4,661	.....	13,119	92	.....	.....	.....	.....	.....	.....	.....	.....	.....	87
8	7,826	12,262	.....	158	.....	.....	.....	.....	.....	.....	.....	.....	.....	88
.....	.....	.....	.....	.....	1	99	6	36	3,279	583	.....	.....	.....	89
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	90
59	5,295	3,121	.....	1,176	.....	.....	.....	3	201	24	37	2,504	771	91
12	11,802	6,559	.....	250	.....	.....	.....	.....	.....	.....	.....	.....	.....	92
53	3,735	1,031	.....	1,049	.....	.....	.....	8	341	63	44	2,509	758	93
18	15,046	27,480	613	356	.....	.....	.....	.....	.....	.....	.....	.....	.....	94
1	1,206	450	.....	21	.....	.....	.....	28	375	117	.....	.....	.....	95
14	7,784	6,364	.....	233	.....	.....	.....	22	2,546	164	492	157,146	7,193	96
6	7,478	1,019	–	133	.....	.....	.....	.....	.....	.....	.....	.....	.....	97
.....	.....	.....	.....	.....	.....	.....	.....	1	84	6	.....	.....	.....	98
1	14	15	.....	2	.....	.....	.....	2	91	10	1	34	4	99
1	2,179	4,507	.....	27	.....	.....	.....	20	75	34	7	4,102	103	100
436	6,958	10,984	.....	869	.....	.....	.....	638	29,336	2,917	159	2,654	329	101
18	470	7	4,025	60	.....	.....	.....	5	11	10	21	208	51	102
621	365,889	466,475	85,791	8,324	12	45,173	897	89	11,553	296	90	45,113	950	103
18	13,935	15,557	.....	321	.....	.....	.....	.....	.....	.....	.....	.....	.....	104
2	82	350	952	10	.....	.....	.....	1	30	2	1	758	4	105
5	5,501	5,452	.....	101	.....	.....	.....	.....	.....	.....	.....	.....	.....	106
149	230,465	463,687	.....	3,812	7	5,526	148	7	13,449	165	100	271,767	3,420	107
9	21,675	10,145	.....	259	16	33,572	431	7	15,982	160	15	34,847	464	108
1	307	56	.....	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	109
20	21,770	6,013	.....	375	.....	.....	.....	6	479	28	30	1,428	178	110
772	2,509,070	2,398,372	9,528	31,937	15	89,840	1,430	490	275,785	9,538	258	528,848	6,063	111
218	411,844	44,245	.....	11,697	24	135,141	3,670	477	430,620	21,335	1,063	1,866,169	59,422	112
1	900	588	.....	21	.....	.....	.....	.....	.....	.....	.....	.....	.....	113
18	222	110	.....	50	.....	.....	.....	.....	.....	.....	.....	.....	.....	114
1	14	7	.....	2	.....	.....	.....	.....	.....	.....	1	14	2	115
81	71,023	162,544	2,120	1,417	.....	.....	.....	.....	.....	.....	1	813	22	116
6	4,653	12,692	.....	111	.....	.....	.....	4	162	25	.....	.....	.....	117
198	388,345	23,981	.....	22,073	.....	.....	.....	85	5,401	962	47	2,481	817	118
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	119
5,549	8,558,739	7,255,332	520,562	179,711	332	540,151	13,269	5,190	1,399,680	66,723	5,046	3,421,916	107729	

No. 7.—Statement of Vessels, British, Canadian and Foreign, entered Outwards *for Sea*

ABSTRACT BY COUNTRIES

No.	Countries to which Departed — Pays de destination	With Cargoes—Chargés									
		British—Britanniques					Canadian—Canadiens				
		Vessels — Navires	Tons register — Tonnage enregistré	Freight, Tons weight — Poids du fret en tonnes	Freight, Tons, measurement — Mesurage du fret en tonnes	Crew — Équipage	Vessels — Navires	Tons register — Tonnage enregistré	Freight Tons weight — Poids du fret en tonnes	Freight, Tons, measurement — Mesurage du fret en tonnes	Crew — Équipage
1	Great Britain	912	4,691,582	3,320,086	360,805	111,250	59	172,636	259,879	1,503	2,224
2	Australia	84	426,916	128,799	16,146	9,236	20	73,869	104,531	.....	824
3	Bermuda	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
4	British South Africa	25	97,718	76,895	59,025	1,234	.....	.....	.....	.....	.....
5	British West Africa	4	15,335	10,478	19,514	190	.....	.....	.....	.....	.....
6	British Guiana	8	2,173	2,050	1,715	67	54	132,904	47,350	.....	2,594
7	British Honduras	.....	.....	.....	.....	.....	7	15,376	9,221	.....	406
8	British India	4	12,490	23,594	.....	171	.....	.....	.....	.....	.....
9	British West Indies other	7	11,724	7,500	1,499	158	53	62,730	54,573	7,052	1,346
10	British Oceania, other	2	5,969	875	1,037	95	.....	.....	.....	.....	.....
11	Fiji Islands	1	3,642	1,525	.....	49	.....	.....	.....	.....	.....
12	Gibraltar	6	15,657	37,680	.....	187	.....	.....	.....	.....	.....
13	Hong Kong	22	174,728	66,993	7,172	4,565	7	61,805	19,841	7,826	3,802
14	Irish Free State	13	39,196	82,603	.....	505	.....	.....	.....	.....	.....
15	Malta	1	2,160	4,928	.....	30	.....	.....	.....	.....	.....
16	Newfoundland	652	516,092	230,557	1,075	17,204	195	117,780	87,885	110	4,100
17	New Zealand	22	104,686	25,740	25,472	2,254	17	57,960	95,956	.....	739
18	Palestine	1	1,899	4,788	.....	27	.....	.....	.....	.....	.....
19	Argentina	5	17,317	6,300	.....	209	.....	.....	.....	.....	.....
20	Azores and Madeira	.....	.....	.....	.....	.....	5	1,183	1,900	2,850	27
21	Belgium	71	246,378	431,153	2,752	3,960	22	74,664	49,010	47	930
22	Brazil	.....	.....	.....	.....	.....	10	35,270	24,158	.....	397
23	Chile	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
24	China	15	74,000	83,133	6	1,344	4	35,344	2,373	.....	2,160
25	Colombia	1	2,005	4,800	.....	29	1	6,711	8,000	.....	46
26	Cuba	18	34,286	20,175	.....	825	3	1,627	1,068	1,804	42
27	Denmark	5	12,791	25,784	.....	172	.....	.....	.....	.....	.....
28	Dutch East Indies	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
29	Dutch West Indies	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
30	Finland	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
31	France	41	238,228	196,696	11,456	7,135	.....	.....	.....	.....	.....
32	French Africa	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
33	Germany	108	415,890	606,634	3,455	7,832	2	6,787	15,990	.....	84
34	Greece	19	48,525	120,237	.....	602	1	2,035	4,590	.....	25
35	Honduras	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
36	Italy	52	161,047	378,827	.....	1,763	.....	.....	.....	.....	.....
37	Japan	24	119,253	86,882	2,551	2,361	11	97,337	12,743	17,620	5,978
38	Korea	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
39	Mexico	.....	.....	.....	.....	.....	3	2,979	140	.....	58
40	Miquelon and St. Pierre	37	10,946	6,872	.....	386	65	32,066	11,256	1,030	1,254
41	Netherlands	93	293,155	683,517	561	3,309	3	9,703	19,927	.....	119
42	Norway	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
43	Panama	1	2,823	480	.....	47	.....	.....	.....	.....	.....
44	Peru	1	3,194	1,120	104	39	.....	.....	.....	.....	.....
45	Poland	2	3,233	7,911	.....	48	.....	.....	.....	.....	.....
46	Porto Rico	2	376	400	.....	15	12	3,221	1,524	.....	100
47	Portugal	15	45,209	100,387	.....	475	.....	.....	.....	.....	.....
48	Russia	3	8,604	21,615	.....	104	.....	.....	.....	.....	.....
49	Spain	29	70,092	171,814	1,571	908	.....	.....	.....	.....	.....
50	Sweden	4	7,753	19,032	.....	109	.....	.....	.....	.....	.....
51	Syria	4	8,145	20,208	.....	115	.....	.....	.....	.....	.....
52	Turkey	6	14,281	38,891	.....	195	.....	.....	.....	.....	.....
53	United States	460	1,857,293	796,993	62,276	43,765	2,821	2,130,234	794,645	64,811	83,056
54	Uruguay	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
55	Venezuela	1	1,249	.....	796	23	.....	.....	.....	.....	.....
56	For Sea	23	21,921	.....	.....	1,589	6	136	2	.....	19
57	Sea Fisheries	90	5,633	760	.....	835	503	43,932	2,817	.....	7,423
	Total	2,894	9,845,594	7,855,712	578,988	225,416	3,884	3,178,289	1,629,379	204,653	117,753

RECAPITULATION

With Cargoes — Chargés	Vessels — Navires	Register — Tonnage enregistré	Freight, tons Weight — Poids du fret en tonnes	Freight, tons Measurement — Mesurage du fret en tonnes	Crew — Équipage
British—Britanniques	2,894	9,845,594	7,855,712	578,988	225,416
Canadian—Canadiens	3,884	3,178,289	1,629,379	204,653	117,753
Foreign—Étrangers	5,549	8,558,739	7,255,332	520,562	179,711
Total	12,327	21,582,622	16,740,423	1,304,203	522,880

N° 7.—ÉTAT des long-courriers britanniques, canadiens et étrangers *déclarés à la sortie*

RELEVÉ PAR PAYS

Foreign—Étrangers					In Ballast—Sur lest									
					British — Britanniques			Canadian — Canadiens			Foreign — Étrangers			
Vessels — Navires	Tons register — Tonnage enregistré	Freight, Tons weight — Poids du fret en tonnes	Freight, Tons measurement — Mesurage du fret en tonnes	Crew — Équipage	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Équipage	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Équipage	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Équipage	No.
170	472,423	461,212	45,961	5,149	21	49,291	1,012	16	28,636	375	17	36,599	582	1
11	30,714	7,064	1,300	356	.....	.....	.....	.....	.....	.....	.....	.....	.....	2
.....	.....	.....	.....	.....	.....	.....	.....	3	99	18	.....	.....	.....	3
2	9,432	9,604	.....	80	.....	.....	.....	.....	.....	.....	.....	.....	.....	4
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5
22	30,434	10,830	.....	554	.....	.....	.....	.....	.....	.....	.....	.....	.....	6
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	7
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	8
62	90,558	84,432	10,301	1,619	3	7,298	90	18	4,733	117	1	534	23	9
2	3,447	2,183	1,971	49	.....	.....	.....	.....	.....	.....	.....	.....	.....	10
1	1,053	2,382	.....	24	.....	.....	.....	.....	.....	.....	.....	.....	.....	11
5	15,107	34,234	.....	179	2	5,510	62	.....	.....	.....	.....	.....	.....	12
4	15,662	7,954	.....	253	.....	.....	.....	.....	.....	.....	.....	.....	.....	13
5	4,907	2,805	.....	107	1	168	24	.....	.....	.....	.....	.....	.....	14
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	15
67	76,909	91,514	.....	1,380	74	42,399	1,745	117	27,557	1,283	92	268,451	3,256	16
11	38,339	12,610	.....	381	.....	.....	.....	.....	.....	.....	.....	.....	.....	17
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	18
43	123,153	59,961	.....	1,294	.....	.....	.....	.....	.....	.....	4	12,578	119	19
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	20
36	125,682	216,070	.....	1,434	1	2,711	32	.....	.....	.....	.....	.....	.....	21
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	22
4	11,401	1,776	153	131	.....	.....	.....	.....	.....	.....	.....	.....	.....	23
65	280,289	283,838	1,696	3,352	3	32,137	1,246	.....	.....	.....	.....	.....	.....	24
19	37,696	19,714	57	563	5	24,364	188	16	102,165	682	4	20,353	159	25
48	67,285	40,561	1,270	2,033	.....	.....	.....	.....	.....	.....	5	13,143	121	26
41	108,638	107,353	.....	2,260	.....	.....	.....	.....	.....	.....	.....	.....	.....	27
1	3,583	660	.....	33	.....	.....	.....	.....	.....	.....	.....	.....	.....	28
.....	.....	.....	.....	.....	1	4,328	54	1	6,845	37	2	9,601	78	29
1	1,927	4,273	.....	32	.....	.....	.....	.....	.....	.....	.....	.....	.....	30
73	228,401	350,555	900	2,856	.....	.....	.....	.....	.....	.....	5	1,025	202	31
1	1,986	4,717	.....	29	.....	.....	.....	.....	.....	.....	.....	.....	.....	32
132	474,925	559,332	935	6,611	.....	.....	.....	.....	.....	.....	1	2,682	29	33
41	116,721	223,850	.....	1,303	.....	.....	.....	.....	.....	.....	.....	.....	.....	34
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	626	20	35
151	504,237	1,072,791	123	5,427	1	3,179	38	.....	.....	.....	.....	.....	.....	36
358	1,438,085	1,291,947	137,646	19,156	12	86,235	2,121	4	35,156	2,165	52	292,563	6,648	37
1	2,908	3,465	.....	40	.....	.....	.....	.....	.....	.....	.....	.....	.....	38
.....	.....	.....	.....	.....	.....	.....	.....	11	12,414	155	2	7,633	73	39
12	5,608	4,220	1,000	272	14	3,258	155	98	17,180	1,124	20	6,102	575	40
100	326,900	563,977	275	4,110	3	10,957	150	.....	.....	.....	.....	.....	.....	41
47	120,162	209,785	1	2,071	.....	.....	.....	.....	.....	.....	5	7,573	100	42
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	43
4	11,537	4,471	56	123	4	19,886	157	8	54,087	357	.....	.....	.....	44
1	4,416	8,698	.....	42	.....	.....	.....	.....	.....	.....	.....	.....	.....	45
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	46
4	13,780	22,202	.....	145	.....	.....	.....	.....	.....	.....	.....	.....	.....	47
3	11,985	9,314	.....	335	.....	.....	.....	.....	.....	.....	1	1,286	26	48
18	42,112	91,082	786	554	.....	.....	.....	.....	.....	.....	2	1,168	115	49
42	127,319	96,296	.....	2,924	.....	.....	.....	.....	.....	.....	.....	.....	.....	50
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	51
1	1,927	4,872	.....	33	1	2,267	33	.....	.....	.....	.....	.....	.....	52
3,024	3,503,694	1,189,935	316,131	100,507	51	233,338	4,390	2,874	1,045,576	45,364	4,083	2,653,887	81,515	53
2	5,433	2,916	.....	59	.....	.....	.....	.....	.....	.....	.....	.....	.....	54
.....	.....	.....	.....	.....	1	3,437	50	.....	.....	.....	2	8,745	84	55
118	17,521	177	.....	1,731	6	222	66	48	1,562	169	48	427	130	56
796	50,443	9,701	.....	10,120	128	9,166	1,656	1,976	63,670	14,877	699	76,940	13,874	57
5,549	8,558,739	7,255,332	520,562	179,711	332	540,151	13,269	5,190	1,399,680	66,723	5,046	3,421,916	107729	

RECAPITULATION

In Ballast — Sur lest	Vessels — Navires	Tons Register — Tonnage enregistré	Freight, tons Weight — Poids du fret en tonnes	Freight, tons Measurement — Mesurage de fret en tonnes	Crew — Équipage
British—Britanniques	332	540,151	.....	.....	13,269
Canadian—Canadiens	5,190	1,399,680	.....	.....	66,723
Foreign—Étrangers	5,046	3,421,916	.....	.....	107,729
Total	10,568	5,361,747	.....	.....	187,721
Grand total	22,895	26,944,369	16,740,423	1,304,203	710,601

No. 8.—Summary Statement of Sea-going Vessels entered and cleared at each Port and Outport

RECAPITULATION BY PORTS AND OUTPORTS

N° 8.—État sommaire des arrivages et des départs des long-courriers à chaque port et port secondaire

RÉCAPITULATION PAR PORTS ET PORTS SECONDAIRES

Ports and Outports — Ports et ports secondaires	Vessels Arrived — Arrivage des navires						Vessels Departed — Départ des navires					
	British — Britanniques		Foreign — Étrangers		Total — Total		British — Britanniques		Foreign — Étrangers		Total — Total	
	No. — Nomb.	Tons — Tonnes	No. — Nomb.	Tons — Tonnes	No. — Nomb.	Tons — Tonnes	No. — Nomb.	Tons — Tonnes	No. — Nomb.	Tons — Tonnes	No. — Nomb.	Tons — Tonnes
Albert, N.B.			1	200	1	200			2	699	2	699
Alert Bay, B.C.	13	587	53	32,669	66	33,256	21	1,689	55	4,547	76	6,236
Amherst, N.S.	3	292			3	292	3	439			3	439
Amherst Harbour, Que.	1	268			1	268						
Annapolis Royal, N.S.	6	568			6	568	10	1,001			10	1,001
Antigonish, N.S.							1	671			1	671
Anyox, B.C.	12	17,136	3	5,779	15	22,915	59	79,476	3	5,779	62	85,255
Arichat, N.S.	17	308	18	388	35	696	21	369	19	688	40	1,057
Baddeck, N.S.	23	4,221	24	33,880	47	38,101	37	2,135	33	45,455	70	47,590
Bamfield, B.C.	19	4,285	52	561	71	4,846	25	4,228	50	518	75	4,746
Barrington Passage, N.S.	5	163	10	422	15	585	6	106	5	205	11	311
Bathurst, N.B.	61	1,828	5	7,484	66	9,312	61	1,828	5	7,484	66	9,312
Bear River, N.S.	9	17,730			9	17,730	12	20,668			12	20,668
Belliveau's Cove, N.S.	11	1,813			11	1,813	20	2,695	1	26	21	2,721
Blubber Bay, B.C.	23	13,670	1	9	24	13,679	108	33,409	1	9	109	33,418
Bonne Esperance, Que.	18	6,574			18	6,574	17	6,555			17	6,555
Bridgetown, N.S.	1	203			1	203						
Bridgewater, N.S.	6	1,851	25	31,020	31	32,871	22	7,276	28	33,550	50	40,826
Britannia Beach, B.C.	85	62,968	32	62,657	117	125,625	82	70,181	32	62,657	114	132,838
Buctouche, N.B.			1	993	1	993			3	2,659	3	2,659
Butedale, B.C.	45	1,395	84	2,422	129	3,817	40	640	84	2,422	124	3,062
Campbellton, N.B.	3	3,784	6	8,337	9	12,121	6	6,449	9	11,496	15	17,945
Campobello, N.B.	400	26,217	407	17,502	807	43,719	349	28,867	406	11,150	755	40,017
Canso, N.S.	104	15,128	33	1,800	137	16,928	99	17,311	31	676	130	17,987
Caraquet, N.B.	104	1,876			104	1,876	105	1,886			105	1,886
Charlottetown, P.E.I.	7	4,183	14	16,650	21	20,833	43	43,417	10	9,618	53	53,035
Chatham, N.B.	3	6,506	5	5,538	8	12,044	4	6,302	10	15,142	14	21,444
Chemainus, B.C.	119	61,336	92	81,952	211	143,288	146	106,243	132	181,835	278	288,078
Chester, N.S.	30	441	1	15	31	456	31	438			31	438
Cheticamp, N.S.			27	24,531	27	24,531			27	24,531	27	24,531
Chicoutimi, Que.			2	2,867	2	2,867						
Clark's Harbour, N.S.	19	961	25	464	44	1,425	12	168	20	314	32	482
Clementsport, N.S.	4	396			4	396	4	396			4	396
Digby, N.S.	25	1,832	22	389	47	2,221	18	993	26	433	44	1,426
Englewood, B.C.	3	8,955	16	62,214	19	71,169	4	13,803	16	61,924	20	75,727
Freeport, N.S.	6	250	10	160	16	410	6	276	10	160	16	436
Gaspé, Que.	17	25,771	5	6,510	22	32,281	23	31,267	9	12,053	32	43,320

Georgetown, P.E.I.	13	3,599	7	6,555	20	10,154	21	6,340	12	12,617	33	18,957
Glace Bay, N.S.	29	965	12	263	41	1,228	30	985	12	263	42	1,248
Guysboro, N.S.	1	223	2	2,285	3	2,508			13	11,419	13	11,419
Halifax, N.S.	1,029	2,478,110	440	1,526,825	1,469	4,004,935	1,242	2,614,602	451	1,608,896	1,693	4,223,498
Havre St. Pierre, Que.	10	8,500			10	8,500	10	8,500			10	8,500
Hillsboro, N.B.			15	10,899	15	10,899			16	11,672	16	11,672
Isaac's Harbour, N.S.	3	30	21	411	24	441	3	30	29	531	32	561
Joggin Mines, N.S.			1	160	1	160	1	340	1	160	2	500
Kentville, N.S.	1	214	1	198	2	412	1	214			1	214
Kildonan, B.C.	53	10,965	500	29,525	553	40,490	82	24,774	499	51,103	581	75,877
Kingsport, N.S.	1	352	1	1,345	2	1,697						
Ladner, B.C.	2	52			2	52	2	52			2	52
Ladysmith, B.C.	120	33,076	55	47,218	175	80,294	161	26,739	53	42,853	214	69,592
La Have, N.S.	41	6,996	1	18	42	7,014	45	5,667	1	18	46	5,685
Lévis, Que.	2	3,935			2	3,935	3	13,242			3	13,242
Liverpool, N.S.	91	3,899	43	8,116	134	12,015	95	4,005	48	12,809	143	16,814
Lockeport, N.S.	16	695	2	86	18	781	18	798	5	116	23	914
Lord's Cove, N.B.	635	9,512	267	2,497	902	12,009	582	10,383	241	2,497	823	12,880
Louisburg, N.S.	28	26,088	104	8,154	132	34,242	34	31,642	103	12,826	137	44,468
Lower East Pubnico, N.S.	5	183	36	2,153	41	2,336	2	82	36	2,153	38	2,235
Lunenburg, N.S.	292	32,538	4	736	296	33,274	326	30,790	3	107	329	30,897
Mabou, N.S.									1	993	1	993
Mahone Bay, N.S.	6	586			6	586	2	195			2	195
Maitland, N.S.			2	732	2	732	1	425			1	425
Meteghan River, N.S.	11	837			11	837	4	518			4	518
Middleton, N.S.							1	480			1	480
Moncton, N.B.	5	1,529	2	1,386	7	2,915	4	884	4	3,339	8	4,223
Montague, P.E.I.	22	1,160			22	1,160	30	1,694			30	1,694
Montreal, Que.	760	3,323,753	413	1,186,110	1,173	4,509,863	810	3,452,647	430	1,239,930	1,240	4,692,577
Murray Harbour, P.E.I.	1	17			1	17	1	17			1	17
Nanaimo, B.C.	41	25,482	201	117,630	242	143,112	109	113,375	226	177,690	335	291,065
New Campbellton, N.S.							1	19			1	19
Newcastle, N.B.							8	9,277	3	2,466	11	11,743
New Westminster, B.C.	106	234,979	118	369,279	224	604,258	103	234,141	117	366,867	220	601,008
North East Harbour, N.S.	1	12	1	1,283	2	1,295	1	12	1	1,283	2	1,295
North Head, N.B.	244	28,967	57	462	301	29,429	257	29,383	53	494	310	29,877
North Sydney, N.S.	647	323,249	259	84,688	906	407,937	630	321,981	274	93,377	904	415,358
Ocean Falls, B.C.	26	68,928	38	65,018	64	133,946	49	110,320	38	65,019	87	175,339
Parrsboro, N.S.	47	14,399	51	25,946	98	40,345	68	20,741	56	29,243	124	49,984
Paspebiac, Que.	1	520	2	1,484	3	2,004						
Pictou, N.S.	5	5,802	6	6,414	11	12,216	7	4,891	9	9,542	16	14,433
Pointe au Pic, Que.									2	1,368	2	1,368
Port Alberni, B.C.	8	9,442	26	58,087	34	67,529	15	35,114	46	136,987	61	172,101
Port Alfred, Que.	32	44,469	28	60,094	60	104,563	5	11,728	9	12,015	14	23,743
Port Clyde, N.S.			1	1,641	1	1,641			1	1,641	1	1,641
Port Elgin, N.B.	2	20			2	20						
Port Hastings, N.S.			1	744	1	744						
Port Hawkesbury, N.S.	43	5,533	6	6,420	49	11,953	28	4,052	10	9,773	38	13,825
Port La Tour, N.S.	2	28			2	28	2	28			2	28
Port Mulgrave, N.S.	1	2,192			1	2,192	2	2,473			2	2,473
Port Wade, N.S.	2	190			2	190	6	299			6	299
Port Williams, N.S.									2	1,876	2	1,876
Powell River, B.C.	75	72,756	111	151,976	186	224,732	66	77,701	113	152,659	179	230,360
Prince Rupert, B.C.	1,155	180,955	1,433	79,880	2,588	260,835	1,237	243,004	1,426	81,564	2,663	324,568
Quatsino, B.C.	24	16,977	22	36,975	46	53,952	3	1,093	24	45,785	27	46,878
Quebec, Que.	385	2,326,582	89	261,353	474	2,587,935	193	894,910	80	238,459	273	1,133,369
Richibucto, N.B.			1	815	1	815	3	2,361	5	4,661	8	7,022
Rimouski, Que.	9	56,724	3	3,357	12	60,081	60	68,813	8	7,826	68	76,639
Riverport, N.S.	57	5,957			57	5,957	37	3,378			37	3,378

No. 8.—Summary Statement of Sea-going Vessels entered and cleared at each Port and Outport—*Concluded*

RECAPITULATION BY PORTS AND OUTPORTS

No. 8.—État sommaire des arrivages et des départs des long-courriers à chaque port et port secondaire—*Fin*

RÉCAPITULATION PAR PORTS ET PORTS SECONDAIRES

Ports and Outports — Ports et ports secondaires	Vessels Arrived — Arrivage des navires						Vessels Departed — Départ des navires					
	British — Britanniques		Foreign — Étrangers		Total — Total		British — Britanniques		Foreign — Étrangers		Total — Total	
	No. — Nomb.	Tons — Tonnes	No. — Nomb.	Tons — Tonnes	No. — Nomb.	Tons — Tonnes	No. — Nomb.	Tons — Tonnes	No. — Nomb.	Tons — Tonnes	No. — Nomb.	Tons — Tonnes
Salmon River, N.S.	1	480			1	480						
Sandy Cove, N.S.							2	69			2	69
Sandy Point, N.S.	7	1,142	91	7,062	98	8,204	9	1,771	96	7,999	105	9,570
Sheet Harbour, N.S.			8	7,227	8	7,227	2	25	12	11,802	14	11,827
Sherburne, N.S.	8	641	89	6,071	97	6,712	18	2,257	97	6,244	115	8,501
Sherbrooke, N.S.	2	565	4	2,780	6	3,345	4	2,433	18	15,046	22	17,479
Shippegan, N.B.	25	336			25	336	28	375	1	1,206	29	1,581
Sidney, B.C.	93	19,918	510	166,618	603	186,536	49	5,078	506	164,930	555	170,008
Sorel, Que.	3	7,543	5	14,854	8	22,397	13	9,164	6	7,478	19	16,642
Souris, P.E.I.	3	232	2	1,211	5	1,443	6	2,104			6	2,104
Steveston, B.C.	23	794	2	42	25	836	18	524	2	48	20	572
Stewart, B.C.	76	49,436	8	6,281	84	55,717	23	4,283	8	6,281	31	10,564
St. Andrews, N.B.	873	37,793	606	9,959	1,479	47,752	832	30,080	595	9,612	1,427	40,592
St. George, N.B.	31	5,481	40	824	71	6,305	31	5,504	39	678	70	6,182
St. John, N.B.	455	1,001,189	727	458,131	1,182	1,459,320	348	745,391	711	411,002	1,059	1,156,393
St. Peters, N.S.	2	958			2	958			18	13,935	18	13,935
St. Stephen, N.B.	7	84	7	3,220	14	3,304	3	52	3	840	6	892
Summerside, P.E.I.	6	3,771	5	6,509	11	10,280	5	5,415	5	5,501	10	10,916
Sydney, N.S.	126	223,540	176	348,362	302	571,902	172	364,073	249	502,232	421	866,305
Three Rivers, Que.	36	107,477	24	56,522	60	163,999	36	107,471	24	56,528	60	163,999
Truro, N.S.	1	140			1	140	4	1,331	1	307	5	1,638
Union Bay, B.C.	22	39,052	41	9,258	63	48,310	65	175,026	50	23,198	115	198,224
Vancouver, B.C.	1,540	3,007,882	1,060	3,042,300	2,600	6,050,182	1,447	3,035,027	1,030	3,037,918	2,477	6,072,945
Victoria, B.C.	1,196	1,474,353	1,326	2,394,848	2,522	3,869,201	1,096	1,300,661	1,281	2,278,013	2,377	3,578,674
Victoria, P.E.I.							1	125	1	900	2	1,025
Westport, N.S.	11	462	19	223	30	685	2	79	18	222	20	301
Weymouth, N.S.	20	3,570	7	927	27	4,497	29	6,334	6	4,653	35	10,987
White Rock, B.C.	4	172			4	172	1	39	2	28	3	67
Windsor, N.S.	120	201,341	66	58,158	186	259,499	131	203,415	82	71,836	213	275,251
Wolfville, N.S.	6	1,219			6	1,219						
Yarmouth, N.S.	115	40,823	246	389,158	361	429,981	129	37,937	245	390,826	374	428,763
York Factory, Man.	1	1,115			1	1,115	1	11,115			1	1,115
Total	12,105	15,896,982	10,426	11,567,176	22,531	27,464,158	12,300	14,963,708	10,595	11,980,661	22,895	26,944,369

No. 9.—Statement of Nationalities of Sea-going Vessels entered and cleared
N° 9.—État de la nationalité des long-courriers, arrivés et partis

ABSTRACT BY NATIONALITIES—RÉSUMÉ PAR NATIONALITÉS

Arrived—Arrivés			Departed—Partis		
Flag—Pavillon	Number — Nombre	Tons — Tonnes	Flag—Pavillon	Number — Nombre	Tons — Tonnes
Great Britain	12,105	15,896,982	Great Britain	12,300	14,963,714
Belgium	2	6,178	Belgium	2	6,212
China	28	108,089	China	35	134,567
Denmark	198	650,506	Denmark	225	767,096
France	337	276,384	Finland	1	1,927
Germany	126	555,551	France	350	282,141
Greece	44	115,501	Germany	130	557,705
Italy	152	536,005	Greece	64	174,245
Japan	413	1,736,318	Italy	169	587,733
Jugo Slavia	3	11,006	Japan	441	1,842,238
Lettonia	1	1,263	Jugo Slavia	3	11,006
Mexico	3	9,710	Lettonia	1	1,263
Netherlands	159	609,301	Mexico	3	8,647
Norway	806	1,603,611	Netherlands	157	567,598
Panama	3	2,736	Norway	901	1,751,893
Poland	5	25,418	Panama	1	912
Russia	2	8,320	Poland	3	15,309
Spain	44	38,618	Russia	2	8,322
Sweden	135	489,639	Spain	45	44,906
United States	7,964	4,781,738	Sweden	120	420,194
Undocumented	1	1,284	United States	7,941	4,795,457
			Undocumented	1	1,284
Total	22,531	27,464,158	Total	22,895	26,944,369

DESCRIPTION OF VESSELS—DESCRIPTION DES NAVIRES

Arrived—Arrivés	Steamers — Vapeurs		Sailing Vessels — Voiliers		Total		Departed—Partis	Steamers — Vapeurs		Sailing Vessels — Voiliers		Total	
	Number — Nombre	Tons — Tonnes	Number — Nombre	Tons — Tonnes	Number — Nombre	Tons — Tonnes		Number — Nombre	Tons — Tonnes	Number — Nombre	Tons — Tonnes	Number — Nombre	Tons — Tonnes
British—Britanniques	10,295	15,619,858	1,810	277,124	12,105	15,896,982	British—Britanniques	10,356	14,671,010	1,944	292,698	12,300	14,963,708
Foreign—Étrangers	9,899	11,419,219	527	147,957	10,426	11,567,176	Foreign—Étrangers	9,980	11,820,743	615	159,918	10,595	11,980,661
Total	20,194	27,039,077	2,337	425,081	22,531	27,464,158	Total	20,336	26,491,753	2,559	452,616	22,895	26,944,369

No. 10.—Summary Statement of Sea-going Vessels entered Inwards and Outwards

N° 10.—État sommaire des long-courriers déclarés à l'entrée et à la sortie

Nationalities — Nationalités	Sea-going Vessels, Inwards — Long-courriers à l'entrée					Sea-going Vessels, Outwards — Long-courriers à la sortie					Total Sea-going Vessels, Inwards and Outwards — Total des long-courriers à l'entrée et à la sortie				
	Vessels — Navires	Tons register — Tonnage enregistré	Freight, Tons weight — Poids du fret en tonnes	Freight, Tons measurement — Mesurage du fret en tonnes	Crew — Équipage	Vessels — Navires	Tons register — Tonnage enregistré	Freight, Tons weight — Poids du fret en tonnes	Freight, Tons measurement — Mesurage fret du en tonnes	Crew — Équipage	Vessels — Navires	Tons register — Tonnage enregistré	Freight, Tons weight — Poids du fret en tonnes	Freight, Tons measurement — Mesurage fret du en tonnes	Crew — Équipage
British—Britanniques	3,174	11,239,915	1,721,394	292,701	278,452	3,226	10,385,745	7,855,712	578,988	238,685	6,400	21,625,660	9,577,106	871,689	517,137
Canadian—Canadiens.	8,931	4,657,067	1,584,531	15,040	184,839	9,074	4,577,969	1,629,379	204,653	184,476	18,005	9,235,036	3,213,910	219,693	369,315
Foreign—Étrangers...	10,426	11,567,176	3,483,262	58,202	283,102	10,595	11,980,655	7,255,332	520,562	287,440	21,021	23,547,831	10,738,594	578,764	570,542
Total.....	22,531	27,464,158	6,789,187	365,943	746,393	22,895	26,944,369	16,740,423	1,304,203	710,601	45,426	54,408,527	23,529,610	1,670,146	1,456,994

No. 11.—Summary Statement of Vessels arrived and departed (exclusive of Coasting Vessels)

N° 11.—État sommaire des arrivages et des départs des navires (à l'exclusion des cabotiers)

Nationalities — Nationalités	Sea-going Vessels, Inwards and Outwards — Long-courriers, à l'entrée et à la sortie			Vessels of the Inland Waters between Canada and the United States — Navires des eaux intérieures, entre le Canada et les États-Unis			Total Shipping (Exclusive of Coasting Vessels), Inwards and Outwards — Nombre total des navires (à l'exclusion des cabotiers), à l'entrée et à la sortie		
	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Équipage	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Équipage	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Équipage
British—Britanniques	6,400	21,625,660	517,137	.....	.....	.....	6,400	21,625,660	517,137
Canadian—Canadiens	18,005	9,235,036	369,315	21,033	20,557,222	579,368	39,038	29,792,258	948,683
Foreign—Étrangers	21,021	23,547,831	570,542	54,724	18,769,478	418,772	75,745	42,317,309	989,314
Total	45,426	54,408,527	1,456,994	75,757	39,326,700	998,140	121,183	93,735,227	2,455,134

TRADE WITH EACH COUNTRY AND NATIONALITY OF VESSELS

No. 12.—STATEMENT of the Number and Tonnage of Steam and Sailing Vessels entered Inwards *from Sea* at each of the undermentioned Ports and Outports in Canada from Foreign Countries, distinguishing the Nationality of the Vessels employed in the trade with each Country.

Ports and Outports and Countries whence Arrived — Ports et ports secondaires et pays de départ	Great Britain — Grande-Bretagne		United States — États-Unis		Norway — Norvège		Sweden — Suède		Belgium — Belgique	
	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
Albert, N.B.—										
United States (b)	.....	.....	1	200	.....	.....	.....	.....	.....	.....
Alert Bay, B.C.—										
United States (a)	2	389	39	32,324	.....	.....	.....	.....	.....	.....
Sea Fisheries (a)	11	198	14	345	.....	.....	.....	.....	.....	.....
Total	13	587	53	32,669	.....	.....	.....	.....	.....	.....
Amherst, N.S.—										
Newfoundland (b)	3	292	.....	.....	.....	.....	.....	.....	.....	.....
Amherst Harbour, Que.—										
St. Pierre (a)	1	268	.....	.....	.....	.....	.....	.....	.....	.....
Annapolis Royal, N.S.—										
United States (b)	6	568	.....	.....	.....	.....	.....	.....	.....	.....
Anyox, B.C.—										
United States (a)	12	17,136	3	5,779	.....	.....	.....	.....	.....	.....
Arichat, N.S.—										
Sea Fisheries (b)	17	308	18	388	.....	.....	.....	.....	.....	.....
Baddeck, N.S.—										
Newfoundland (a)	2	1,695	.....	.....	3	3,099	.....	.....	.....	.....
United States (a)	1	2,035	1	1,658	.....	.....	.....	.....	.....	.....
United States (b)	.....	.....	1	498	.....	.....	.....	.....	.....	.....
Sea Fisheries (b)	20	491	.....	.....	.....	.....	.....	.....	.....	.....
Total	23	4,221	2	2,156	3	3,099	.....	.....	.....	.....
Bamfield, B.C.—										
From Sea (a)	8	127	42	274	.....	.....	.....	.....	.....	.....
United States (a)	11	4,158	10	287	.....	.....	.....	.....	.....	.....
Total	19	4,285	52	561	.....	.....	.....	.....	.....	.....
Barrington Passage, N.S.										
British West Indies (b)	1	99	.....	.....	.....	.....	.....	.....	.....	.....
United States (a)	.....	.....	6	214	.....	.....	.....	.....	.....	.....
Sea Fisheries (a)	4	64	4	208	.....	.....	.....	.....	.....	.....
Total	5	163	10	422	.....	.....	.....	.....	.....	.....
Bathurst, N.B.—										
Great Britain (a)	.....	.....	.....	.....	2	2,218	.....	.....	.....	.....
British West Indies (b)	2	639	.....	.....	.....	.....	.....	.....	.....	.....
Norway (a)	.....	.....	.....	.....	1	2,223	.....	.....	.....	.....
United States (a)	.....	.....	.....	.....	1	1,743	.....	.....	.....	.....
United States (b)	1	295	.....	.....	.....	.....	.....	.....	.....	.....
Sea Fisheries (b)	58	894	.....	.....	.....	.....	.....	.....	.....	.....
Total	61	1,828	.....	.....	4	6,184	.....	.....	.....	.....
Bear River, N.S.—										
United States (a)	9	17,730	.....	.....	.....	.....	.....	.....	.....	.....

(a) Steam—Vapeurs. (b) Sail—Voiliers.

COMMERCE AVEC CHAQUE PAYS ET NATIONALITÉ DES NAVIRES

N° 12.—RELEVÉ du nombre et du tonnage des long-courriers à voiles et à vapeur déclarés *à l'entrée* à chacun des ports et ports secondaires sous-mentionnés du Canada venant des pays étrangers, et de la nationalité des navires employés dans le commerce avec chaque pays.

Denmark — Danemark		France — France		Germany — Allemagne		Netherlands — Pays-Bas		Japan — Japon		Other Nationalities — Autres nationalités			Total	
Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Ves. sels — Navires	Tons Register — Tonnage enregistré	Flag — Pavillon	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
													1	200
													41	32,713
													25	543
													66	33,256
													3	292
													1	268
													6	568
													15	22,915
													35	696
													5	4,794
2	3,001					17	25,624						21	32,318
													1	498
													20	491
2	3,001					17	25,624						47	38,101
													50	401
													21	4,445
													71	4,846
													1	99
													6	214
													8	272
													15	585
				1	1,300								3	3,518
													2	639
													1	2,223
													1	1,743
													1	295
													58	894
				1	1,300								66	9,312
													9	17,730

No. 12.—STATEMENT of the Number and Tonnage of Steam and Sailing Vessels entered Inwards *from Sea*, etc.—*Continued*

Ports and Outports and Countries whence Arrived — Ports et ports secondaires et pays de départ	Great Britain — Grande-Bretagne		United States — États-Unis		Norway — Norvège		Sweden — Suède		Belgium — Belgique	
	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
Belliveau's Cove, N.S.—										
British West Indies (b)	1	282								
Cuba (b)	1	238								
St. Pierre (b)	1	103								
United States (b)	7	1,181								
Sea Fisheries (b)	1	9								
Total	11	1,813								
Blubber Bay, B.C.—										
United States (a)	23	13,670	1	9						
Bonne Esperance, Que.—										
Newfoundland (a)	16	6,471								
Newfoundland (b)	2	103								
Total	18	6,574								
Bridgetown, N.S.—										
United States (b)	1	203								
Bridgewater, N.S.—										
United States (a)					25	31,020				
United States (b)	6	1,851								
Total	6	1,851			25	31,020				
Britannia Beach, B.C.—										
United States (a)	85	62,968	32	62,657						
Buctouche, N.B.—										
United States (a)					1	993				
Butedale, B.C.—										
United States (a)	3	759	48	1,429						
Sea Fisheries (a)	42	636	36	993						
Total	45	1,395	84	2,422						
Campbellton, N.B.—										
Great Britain (a)	1	1,838								
Newfoundland (a)	1	1,617			3	4,018				
United States (a)					1	2,610				
United States (b)	1	329	1	567						
Total	3	3,784	1	567	4	6,628				
Campobello, N.B.—										
United States (a)	400	26,217	407	17,502						
Canso, N.S.—										
Newfoundland (a)			1	9	1	1,101				
From Sea (a)	1	40								
From Sea (b)	1	21								
United States (b)	2	691								
Sea Fisheries (a)	69	11,480	30	624						
Sea Fisheries (b)	31	2,896	1	66						
Total	104	15,128	32	699	1	1,101				
Caraquet, N.B.—										
Sea Fisheries (b)	104	1,876								

(a) Steam—Vapeurs. (b) Sail—Voiliers.

N° 12.—Relevé du nombre et du tonnage des long-courriers à voiles et à vapeur, déclarés *à l'entrée*, etc.—*Suite*

Denmark — Danemark		France — France		Germany — Allemagne		Netherlands — Pays-Bas		Japan — Japon		Other Nationalities — Autres nationalités			Total	
Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Flag — Pavillon	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
													1	282
													1	238
													1	103
													7	1,181
													1	9
													11	1,813
													24	13,679
													16	6,471
													2	103
													18	6,574
													1	203
													25	31,020
													6	1,851
													31	32,871
													117	125,625
													1	993
													51	2,188
													78	1,629
													129	3,817
													1	1,838
1	1,142												5	6,777
													1	2,610
													2	896
1	1,142												9	12,121
													807	43,719
													2	1,110
													1	40
													1	21
													2	691
													99	12,104
													32	2,962
													137	16,928
													104	1,876

No. 12.—STATEMENT of the Number and Tonnage of Steam and Sailling Vessels entered Inwards *from Sea*, etc.—*Continued*

Ports and Outports and Countries whence Arrived — Ports et ports secondaires et pays de départ	Great Britain — Grande-Bretagne		United States — États-Unis		Norway — Norvège		Sweden — Suède		Belgium — Belgique	
	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
Charlottetown, P.E.I.—										
British West Indies (a)	1	1,900	.....	.....	2	2,173	.....	.....	.....	.....
British West Indies (b)	2	720	.....	.....	.....	.....	.....	.....	.....	.....
Newfoundland (b)	3	258	.....	.....	.....	.....	.....	.....	.....	.....
Germany (a)	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
St. Pierre (a)	.....	.....	.....	.....	1	1,028	.....	.....	.....	.....
United States (a)	1	1,305	.....	.....	3	3,007	.....	.....	.....	.....
United States (b)	.....	.....	4	3,017	.....	.....	.....	.....	.....	.....
Total	7	4,183	4	3,017	6	6,208	.....	.....	.....	.....
Chatham, N.B.—										
Newfoundland (a)	.....	.....	.....	.....	1	1,138	.....	.....	.....	.....
St. Pierre (a)	.....	.....	.....	.....	1	932	.....	.....	.....	.....
United States (a)	2	5,567	.....	.....	2	2,741	.....	.....	.....	.....
United States (b)	1	939	.....	.....	.....	.....	.....	.....	.....	.....
Total	3	6,506	.....	.....	4	4,811	.....	.....	.....	.....
Chemainus, B.C.—										
China (a)	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Japan (a)	1	3,032	.....	.....	1	2,441	.....	.....	.....	.....
United States (a)	87	26,079	56	13,402	.....	.....	.....	.....	.....	.....
United States (b)	31	32,225	29	45,153	.....	.....	.....	.....	.....	.....
Total	119	61,336	85	58,555	1	2,441	.....	.....	.....	.....
Chester, N.S.—										
United States (a)	.....	.....	1	15	.....	.....	.....	.....	.....	.....
Sea Fisheries (a)	30	441	.....	.....	.....	.....	.....	.....	.....	.....
Total	30	441	1	15	.....	.....	.....	.....	.....	.....
Cheticamp, N.S.—										
Newfoundland (a)	.....	.....	.....	.....	1	883	.....	.....	.....	.....
United States (a)	.....	.....	.....	.....	26	23,648	.....	.....	.....	.....
Total	.....	.....	.....	.....	27	24,531	.....	.....	.....	.....
Chicoutimi, Que.—										
Great Britain (a)	.....	.....	.....	.....	1	1,849	.....	.....	.....	.....
United States (a)	.....	.....	1	1,018	.....	.....	.....	.....	.....	.....
Total	.....	.....	1	1,018	1	1,849	.....	.....	.....	.....
Clark's Harbour, N.S.—										
British West Indies (b)	1	310	.....	.....	.....	.....	.....	.....	.....	.....
United States (a)	1	95	25	464	.....	.....	.....	.....	.....	.....
Sea Fisheries (a)	17	556	.....	.....	.....	.....	.....	.....	.....	.....
Total	19	961	25	464	.....	.....	.....	.....	.....	.....
Clementsford, N.S.—										
United States (b)	4	396	.....	.....	.....	.....	.....	.....	.....	.....
Digby, N.S.—										
British West Indies (b)	2	494	.....	.....	.....	.....	.....	.....	.....	.....
United States (a)	16	784	22	389	.....	.....	.....	.....	.....	.....
United States (b)	3	374	.....	.....	.....	.....	.....	.....	.....	.....
Sea Fisheries (a)	4	180	.....	.....	.....	.....	.....	.....	.....	.....
Total	25	1,832	22	389	.....	.....	.....	.....	.....	.....
Englewood, B.C.—										
Japan (a)	1	3,072	.....	.....	.....	.....	.....	.....	.....	.....
United States (a)	2	5,883	16	62,214	.....	.....	.....	.....	.....	.....
Total	3	8,955	16	62,214	.....	.....	.....	.....	.....	.....

(a) Steam—Vapeurs. (b) Sail—Voiliers.

N° 12.—Relevé du nombre et du tonnage des long-courriers à voiles et à vapeur, déclarés *à l'entrée*, etc.—*Suite*

Denmark — Danemark		France — France		Germany — Allemagne		Netherlands — Pays-Bas		Japan — Japon		Other Nationalities — Autres nationalités			Total	
Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Flag — Pavillon	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
													3	4,073
													2	720
													3	258
				1	3,771								1	3,771
													1	1,028
1	1,206					2	2,448						7	7,966
													4	3,017
1	1,206			1	3,771	2	2,448						21	20,833
													1	1,138
													1	932
1	727												5	9,035
													1	939
1	727												8	12,044
1	4,159												1	4,159
								3	10,699				5	16,172
1	2,694							1	3,404				145	45,579
													60	77,378
2	6,853							4	14,103				211	143,288
													1	15
													30	441
													31	456
													1	883
													26	23,648
													27	24,531
													1	1,849
													1	1,018
													2	2,867
													1	310
													26	559
													17	556
													44	1,425
													4	396
													2	494
													38	1,173
													3	374
													4	180
													47	2,221
													1	3,072
													18	68,097
													19	71,169

No. 12.—STATEMENT of the Number and Tonnage of Steam and Sailing Vessels entered Inwards *from Sea*, etc.—*Continued*

Ports and Outports and Countries whence Arrived — Ports et ports secondaires et pays de départ	Great Britain — Grande-Bretagne		United States — États-Unis		Norway — Norvège		Sweden — Suède		Belgium — Belgique	
	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
Freeport, N.S.—										
United States (a)	6	250	10	160	.....	.....	.....	.....	.....	.....
Gaspé, Que.—										
Great Britain (a)	.....	.....	.....	.....	1	895	.....	.....	.....	.....
British West Indies (b)	1	323	.....	.....	.....	.....	.....	.....	.....	.....
Newfoundland (a)	12	24,348	1	3,185	.....	.....	.....	.....	.....	.....
Newfoundland (b)	1	66	.....	.....	.....	.....	.....	.....	.....	.....
St. Pierre (a)	1	147	.....	.....	.....	.....	.....	.....	.....	.....
Spain (a)	.....	.....	.....	.....	1	689	.....	.....	.....	.....
United States (a)	2	887	.....	.....	.....	.....	.....	.....	.....	.....
Total	17	25,771	1	3,185	2	1,584	.....	.....	.....	.....
Georgetown, P.E.I.—										
Newfoundland (a)	.....	.....	.....	.....	6	5,562	.....	.....	.....	.....
Newfoundland (b)	9	459	.....	.....	.....	.....	.....	.....	.....	.....
St. Pierre (b)	2	100	.....	.....	.....	.....	.....	.....	.....	.....
United States (a)	1	3,030	.....	.....	1	993	.....	.....	.....	.....
Sea Fisheries (b)	1	10	.....	.....	.....	.....	.....	.....	.....	.....
Total	13	3,599	.....	.....	7	6,555	.....	.....	.....	.....
Glace Bay, N.S.—										
From Sea (a)	2	22	.....	.....	.....	.....	.....	.....	.....	.....
From Sea (b)	26	932	.....	.....	.....	.....	.....	.....	.....	.....
United States (b)	.....	.....	12	263	.....	.....	.....	.....	.....	.....
Sea Fisheries (b)	1	11	.....	.....	.....	.....	.....	.....	.....	.....
Total	29	965	12	263	.....	.....	.....	.....	.....	.....
Guysboro, N.S.—										
Great Britain (a)	1	223	.....	.....	.....	.....	.....	.....	.....	.....
United States (a)	.....	.....	.....	.....	1	993	.....	.....	.....	.....
Azores and Madeira (a)	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total	1	223	.....	.....	1	993	.....	.....	.....	.....
Halifax, N.S.—										
Great Britain (a)	117	790,924	1	5,764	12	12,019	1	1,168	.....	.....
British West Indies (a)	47	125,692	.....	.....	18	19,832	21	22,489	.....	.....
British West Indies (b)	4	574	1	816	.....	.....	.....	.....	.....	.....
Newfoundland (a)	119	167,867	2	181	2	858	.....	.....	.....	.....
Newfoundland (b)	36	3,554	.....	.....	.....	.....	.....	.....	.....	.....
Belgium (a)	26	222,817	.....	.....	1	958	.....	.....	.....	.....
Peru (a)	17	89,946	.....	.....	.....	.....	.....	.....	.....	.....
Cuba (a)	.....	.....	.....	.....	2	1,915	1	1,020	.....	.....
France (a)	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Germany (a)	.....	.....	4	15,248	.....	.....	1	1,072	.....	.....
Netherlands (a)	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Norway (a)	.....	.....	.....	.....	19	128,364	.....	.....	.....	.....
Argentina (a)	3	10,006	.....	.....	.....	.....	.....	.....	.....	.....
San Domingo (a)	.....	.....	.....	.....	1	932	.....	.....	.....	.....
From Sea (a)	24	19,989	.....	.....	.....	.....	.....	.....	.....	.....
St. Pierre (a)	46	9,310	.....	.....	4	1,983	.....	.....	.....	.....
St. Pierre (b)	3	525	.....	.....	.....	.....	.....	.....	.....	.....
Spain (a)	2	3,795	.....	.....	2	1,949	.....	.....	.....	.....
Sweden (a)	.....	.....	.....	.....	.....	.....	28	220,977	.....	.....
United States (a)	197	777,388	29	65,358	19	26,246	18	89,128	.....	.....
United States (b)	10	3,591	7	4,085	.....	.....	.....	.....	.....	.....
Denmark (a)	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Portugal (b)	1	376	.....	.....	.....	.....	.....	.....	.....	.....
Australia (a)	21	85,600	.....	.....	.....	.....	.....	.....	.....	.....
Dutch West Indies (a)	1	6,845	2	11,706	.....	.....	.....	.....	.....	.....
Greece (a)	1	175	.....	.....	.....	.....	.....	.....	.....	.....
Russia (a)	1	2,307	.....	.....	.....	.....	.....	.....	.....	.....
Colombia (a)	3	19,376	2	11,658	.....	.....	.....	.....	.....	.....
British India (a)	22	78,578	3	10,821	.....	.....	.....	.....	.....	.....
British South Africa (a)	2	5,141	.....	.....	.....	.....	.....	.....	.....	.....
Turkey (a)	1	3,257	.....	.....	.....	.....	.....	.....	.....	.....
Sea Fisheries (a)	312	49,332	7	320	.....	.....	.....	.....	.....	.....
Sea Fisheries (b)	13	1,145	.....	.....	.....	.....	.....	.....	.....	.....
Total	1,029	2,478,110	58	125,957	80	195,056	70	335,854	.....	.....

(a) Steam—Vapeurs. (b) Sail—Voiliers.

N° 12.—Relevé du nombre et du tonnage des long-courriers à voiles et à vapeur, déclarés *à l'entrée*, etc.—*Suite*

Denmark — Danemark		France — France		Germany — Allemagne		Netherlands — Pays-Bas		Japan — Japon		Other Nationalities — Autres nationalités			Total	
Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Flag — Pavillon	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
													16	410
													1	895
													1	323
													13	27,533
													1	66
		1	535										2	682
													1	689
1	1,206												3	2,093
1	1,206	1	535										22	32,281
													6	5,562
													9	459
													2	100
													2	4,023
													1	10
													20	10,154
													2	22
													26	932
													12	263
													1	11
													41	1,228
													1	223
													1	993
1	1,292												1	1,292
1	1,292												3	2,508
6	6,738			2	1,941					Italy	1	1,283	141	820,335
3	3,863	1	147	2	2,036	2	2,258			Spain	1	498	94	176,317
													5	1,390
													123	168,906
													36	3,554
													27	223,775
										Poland	1	5002,	18	94,948
1	1,099												4	4,034
		13	63,149										13	63,149
				32	218,635								37	234,955
						22	181,009						22	181,009
													19	128,364
										Italy	1	3,177	4	13,183
1	1,290												2	2,222
		12	12,576										36	32,565
		7	2,720							Spain	1	498	58	14,511
		1	442										3	525
										Spain	1	498	6	6,684
11	48,379	1	1,116										28	220,977
													275	1,007,615
51	285,988												17	7,676
													51	285,988
													1	376
													21	85,600
													3	18,551
													1	175
													1	2,307
										Poland	1	5,107	6	36,141
													25	89,399
													2	5,141
													1	3,257
		55	19,151							Spain	2	1,358	376	70,161
													13	1,145
73	347,357	90	99,301	36	222,612	24	183,267				9	17,421	1,469	4,004,935

No. 12.—STATEMENT of the Number and Tonnage of Steam and Sailing Vessels entered Inwards *from Sea*, etc.—*Continued*

Ports and Outports and Countries whence Arrived — Ports et ports secondaires et pays de départ	Great Britain — Grande-Bretagne		United States — États-Unis		Norway — Norvège		Sweden — Suède		Belgium — Belgique	
	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
Havre St. Pierre, Que.—										
Newfoundland (a)	10	8,500								
Hillsboro, N.B.—										
United States (a)					13	10,049				
United States (b)			2	850						
Total			2	850	13	10,049				
Isaacs Harbour, N.S.—										
Sea Fisheries (a)	3	30	21	411						
Joggin Mines, N.S.—										
United States (b)			1	160						
Kentville, N.S.—										
United States (b)	1	214	1	198						
Kildonan, B.C.—										
United States (a)	10	10,094	475	15,682						
Japan (a)										
Sea Fisheries (a)	43	871	21	334						
Total	53	10,965	496	16,016						
Kingsport, N.S.—										
United States (a)					1	1,345				
United States (b)	1	352								
Total	1	352			1	1,345				
Ladner, B.C.—										
United States (a)	2	52								
Ladysmith, B.C.—										
United States (a)	67	20,563	42	45,119						
United States (b)	53	12,513	13	2,099						
Total	120	33,076	55	47,218						
La Have, N.S.—										
British West Indies (a)	1	33								
British West Indies (b)	3	611								
St. Pierre (b)	1	128								
United States (a)	1	40								
United States (b)	6	3,279								
Sea Fisheries (a)	1	77	1	18						
Sea Fisheries (b)	28	2,828								
Total	41	6,996	1	18						
Levis, Que.—										
Great Britain (a)	2	3,935								
Liverpool, N.S.—										
British West Indies (b)	1	354								
Newfoundland (a)	1	72								
From Sea (a)	3	115								
St. Pierre (a)	36	2,025			1	944				
Spain (a)			1	84						
United States (a)	2	88	15	1,068			2	2,177		
United States (b)	1	123	3	2,642						
Sea Fisheries (a)	47	1,122	21	1,201						
Total	91	3,899	40	4,995	1	944	2	2,177		

(a) Steam—Vapeurs. (b) Sail—Voiliers.

N° 12.—Relevé du nombre et du tonnage des longs-courriers à voiles et à vapeur, déclarés *à l'entrée*, etc.—*Suite*

Denmark — Danemark		France — France		Germany — Allemagne		Netherlands — Pays-Bas		Japan — Japon		Other Nationalities — Autres nationalités			Total	
Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Flag — Pavillon	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
													10	8,500
													13	10,049
													2	850
													15	10,899
													24	441
													1	160
													2	412
													485	25,776
1	2,353							3	11,156				4	13,509
													64	1,205
1	2,353							3	11,156				553	40,490
													1	1,345
													1	352
													2	1,697
													2	52
													109	65,682
													66	14,612
													175	80,294
													1	33
													3	611
													1	128
													1	40
													6	3,279
													2	95
													28	2,828
													42	7,014
													2	3,935
													1	354
													1	72
													3	115
													37	2,969
													1	84
													19	3,333
													4	2,765
													68	2,323
													134	12,015

No. 12.—Statement of the Number and Tonnage of Steam and Sailing Vessels entered Inwards *from Sea*, etc.—*Continued*

Ports and Outports and Countries whence Arrived — Ports et ports secondaires et pays de départ	Great Britain — Grande-Bretagne		United States — États-Unis		Norway — Norvège		Sweden — Suède		Belgium — Belgique	
	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
Lockeport, N.S.—										
United States (b)			2	86						
Sea Fisheries (b)	16	695								
Total	16	695	2	86						
Lord's Cove, N.B.—										
United States (a)	635	9,512	267	2,497						
Louisburg, N.S.—										
Great Britain (a)	2	6,896								
Newfoundland (a)	4	4,274								
Newfoundland (b)	5	336	3	309						
France (a)										
St. Pierre (a)	1	29			2	1,404				
United States (a)	7	14,363	2	94	1	1,281				
Sea Fisheries (a)										
Sea Fisheries (b)	9	190	87	1,850						
Total	28	26,088	92	2,253	3	2,685				
Lower East Pubnico, N.S.—										
United States (a)	3	101								
Sea Fisheries (a)	2	82	36	2,153						
Total	5	183	36	2,153						
Lunenburg, N.S.—										
British West Indies (b)	29	6,657								
Newfoundland (a)	2	641								
Newfoundland (b)	12	1,120								
St. Pierre (a)	20	1,472								
St. Pierre (b)	2	220								
United States (a)	1	30								
United States (b)	9	3,193	1	629						
Sea Fisheries (a)	67	4,243	3	107						
Sea Fisheries (b)	150	14,962								
Total	292	32,538	4	736						
Mahone Bay, N.S.—										
Sea Fisheries (b)	6	586								
Maitland, N.S.—										
United States (b)			2	732						
Meteghan River, N.S.—										
St. Pierre (b)	9	385								
United States (b)	2	452								
Total	11	837								
Moncton, N.B.—										
British West Indies (b)	1	283								
United States (a)										
United States (b)	4	1,246	1	352						
Total	5	1,529	1	352						
Montague, P.E.I.—										
Newfoundland (b)	22	1,160								

(a) Steam—Vapeurs. (b) Sail—Voiliers.

N° 12.—RELEVÉ du nombre et du tonnage des long-courriers à voiles et à vapeur, déclarés *à l'entrée*, etc.—*Suite*

Denmark — Danemark		France — France		Germany — Allemagne		Netherlands — Pays-Bas		Japan — Japon		Other Nationalities — Autres nationalités			Total	
Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Flag — Pavillon	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
													2	86
													16	695
													18	781
													902	12,009
													2	6,896
													4	4,274
													8	645
		1	431										1	431
		3	665										6	2,098
													10	15,738
		5	2,120										5	2,120
													96	2,040
		9	3,216										132	34,242
													3	101
													38	2,235
													41	2,336
													29	6,657
													2	641
													12	1,120
													20	1,472
													2	220
													1	30
													10	3,822
													70	4,350
													150	14,962
													296	33,274
													6	586
													2	732
													9	385
													2	452
													11	837
													1	283
						1	1,034						1	1,034
													5	1,598
						1	1,034						7	2,915
													22	1,160

No. 12.—STATEMENT of the Number and Tonnage of Steam and Sailing Vessels entered Inwards *from Sea*, etc.—*Continued*

Ports and Outports and Countries whence Arrived — Ports et ports secondaires et pays de départ	Great Britain — Grande-Bretagne		United States — États-Unis		Norway — Norvège		Sweden — Suède		Belgium — Belgique	
	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
Montreal, Que.—										
Great Britain (a)	442	2,277,868	1	2,045	21	24,612	2	3,274	.....	.....
British West Indies (a)	33	69,734	.....	.....	9	13,992	3	3,933	.....	.....
Newfoundland (a)	57	80,435	.....	.....	4	8,260	.....	.....	.....	.....
Chile (a)	1	3,135	.....	.....	1	4,119	.....	.....	.....	.....
Belgium (a)	40	190,890	.....	.....	6	4,441	.....	.....	.....	.....
Australia (a)	11	39,810	.....	.....	.....	.....	.....	.....	.....	.....
New Zealand (a)	7	23,042	.....	.....	.....	.....	.....	.....	.....	.....
Cuba (a)	2	4,698	.....	.....	3	3,220	.....	.....	.....	.....
Argentina (a)	6	17,093	.....	.....	4	10,672	1	2,870	.....	.....
France (a)	7	32,752	.....	.....	10	28,055	.....	.....	.....	.....
Germany (a)	22	100,612	.....	.....	14	38,722	2	7,279	.....	.....
Netherlands (a)	3	9,475	.....	.....	13	41,091	.....	.....	.....	.....
Italy (a)	24	80,530	.....	.....	.....	.....	.....	.....	.....	.....
Russia (a)	1	2,237	.....	.....	.....	.....	.....	.....	.....	.....
Norway (a)	.....	.....	.....	.....	12	29,872	.....	.....	.....	.....
Mexico (a)	3	15,732	.....	.....	1	2,147	.....	.....	.....	.....
Colombia (a)	17	107,453	15	81,990	.....	.....	.....	.....	.....	.....
Porto Rico (a)	1	1,428	.....	.....	.....	.....	.....	.....	.....	.....
San Domingo (a)	3	5,640	.....	.....	1	683	.....	.....	.....	.....
Brazil (a)	3	10,433	.....	.....	.....	.....	.....	.....	.....	.....
Peru (a)	5	33,954	.....	.....	.....	.....	.....	.....	.....	.....
Venezuela (a)	2	8,414	.....	.....	.....	.....	.....	.....	.....	.....
St. Pierre (a)	1	926	.....	.....	.....	.....	.....	.....	.....	.....
Portugal (a)	4	11,850	.....	.....	.....	.....	1	1,673	.....	.....
Spain (a)	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Denmark (a)	.....	.....	.....	.....	3	1,957	.....	.....	.....	.....
Sweden (a)	.....	.....	.....	.....	4	9,080	.....	.....	.....	.....
United States (a)	34	94,345	13	34,117	15	49,686	3	5,199	.....	.....
Irish Free State (a)	3	8,453	.....	.....	1	2,293	.....	.....	.....	.....
Egypt (a)	4	13,228	.....	.....	.....	.....	.....	.....	.....	.....
French Africa (a)	11	34,292	.....	.....	.....	.....	.....	.....	.....	.....
Dutch West Indies (a)	.....	.....	2	12,287	.....	.....	.....	.....	.....	.....
British South Africa (a)	12	42,957	.....	.....	.....	.....	.....	.....	.....	.....
Poland (a)	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Greece (a)	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Gibraltar (a)	1	2,337	.....	.....	.....	.....	.....	.....	.....	.....
Total	760	3,323,753	31	130,439	122	272,902	12	24,228	.....	.....
Murray Harbour, P.E.I.—										
Sea Fisheries (b)	1	17	.....	.....	.....	.....	.....	.....	.....	.....
Nanaimo, B.C.—										
Japan (a)	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
United States (a)	34	23,843	139	62,418	.....	.....	.....	.....	.....	.....
United States (b)	7	1,639	53	18,226	.....	.....	.....	.....	.....	.....
British Oceania (a)	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total	41	25,482	192	80,644	.....	.....	.....	.....	.....	.....

(a) Steam—Vapeurs. (b) Sail—Voiliers.

N° 12.—Relevé du nombre et du tonnage des long-courriers à voiles et à vapeur, déclarés *à l'entrée*, etc.—*Suite*

Denmark — Danemark		France — France		Germany — Allemagne		Netherlands — Pays-Bas		Japan — Japon		Other Nationalities — Autres nationalités			Total	
Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Flag — Pavillon	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
										Italy	5	15,765		
6	8,383	6	12,826	.....	.....	12	25,136	.....	.....	Jugo-Slavia	1	3,783	503	2,391,875
										Greece	6	14,973		
										Spain	1	3,210		
6	9,389	.....	.....	.....	.....	.....	.....	.....	.....	Greece	1	2,646	52	99,694
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	61	88,695
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	7,254
.....	.....	.....	.....	.....	.....	2	4,232	.....	.....	Italy	2	7,804	51	209,590
										Greece	1	2,223		
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	11	39,810
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	7	23,042
1	3,835	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6	11,753
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Greece	1	2,637	13	36,079
										Italy	1	2,807		
.....	.....	1	4,164	.....	.....	.....	.....	.....	.....	Italy	1	3,440	24	82,492
										Greece	5	14,081		
2	6,850	.....	.....	22	92,126	4	9,278	1	4,259	Italy	3	11,029	70	270,155
										Italy	5	18,013		
.....	.....	1	3,656	.....	.....	32	95,260	1	4,280	Spain	1	3,374	61	189,589
										Jugo-Slavia	1	3,927		
										Greece	4	10,513		
.....	.....	.....	.....	.....	.....	1	2,132	.....	.....	Italy	37	123,707	68	223,099
										Greece	6	16,730		
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	2,237
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	12	29,872
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Mexico	1	3,236	5	21,115
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Poland	2	10,202	34	199,645
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1,428
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4	6,323
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	10,433
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5	33,954
.....	.....	.....	.....	.....	.....	1	4,237	.....	.....	Mexico	1	3,237	4	15,888
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	926
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Italy	1	3,214	10	26,363
										Greece	4	9,626		
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Italy	1	3,310	3	7,757
										Greece	2	4,447		
1	1,284	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4	3,241
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4	9,080
										Italy	13	46,497		
6	12,841	2	5,745	.....	.....	3	6,050	1	4,259	Greece	2	4,583	93	266,731
										Spain	1	3,409		
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4	10,746
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Jugo-Slavia	1	3,296	5	16,524
.....	.....	.....	.....	.....	.....	.....	.....	1	4,280	Italy	5	17,852	20	64,117
										Greece	3	7,693		
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Poland	1	5,107	3	17,394
.....	.....	2	4,758	.....	.....	.....	.....	.....	.....	.....	.....	.....	14	47,715
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Italy	1	4,416	1	4,416
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Italy	1	2,995	8	25,049
										Greece	7	22,054		
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Italy	2	6,950		
										Spain	1	3,389	5	15,782
										Belgium	1	3,106		
22	42,582	12	31,149	22	92,126	55	146,325	4	17,078	.....	133	429,281	1,173	4,509,863
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	17
.....	.....	.....	.....	.....	.....	.....	.....	2	8,430	.....	.....	.....	2	8,430
1	3,583	.....	.....	.....	.....	1	4,366	4	16,855	.....	.....	.....	179	111,065
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	60	19,865
.....	.....	.....	.....	.....	.....	.....	.....	1	3,752	.....	.....	.....	1	3,752
1	3,583	.....	.....	.....	.....	1	4,366	7	29,037	.....	.....	.....	242	143,112

No. 12.—STATEMENT of the Number and Tonnage of Steam and Sailing Vessels entered Inwards *from Sea*, etc.—*Continued*

Ports and Outports and Countries whence Arrived — Ports et ports secondaires et pays de départ	Great Britain — Grande-Bretagne		United States — États-Unis		Norway — Norvège		Sweden — Suède		Belgium — Belgique	
	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
New Westminster, B.C.—										
Great Britain (a)	16	58,398								
China (a)	1	2,991	1	4,319						
Cuba (a)										
France (a)	1	3,928								
Italy (a)	1	2,826								
Japan (a)	5	15,871			2	5,705				
Spain (a)										
United States (a)	72	146,535	45	117,537	6	20,040	1	2,558		
United States (b)	9	2,080	1	360						
Costa Rica (a)	1	2,350								
Argentina (a)			1	3,516						
Total	106	234,979	48	125,732	8	25,745	1	2,558		
North East Harbour, N.S.—										
United States (a)			1	1,283						
Sea Fisheries (a)	1	12								
Total	1	12	1	1,283						
North Head, N.B.—										
British West Indies (b)	1	316								
United States (a)	243	28,651	57	462						
Total	244	28,967	57	462						
orth Sydney, N.S.—										
Great Britain (a)	8	19,095								
British West Indies (a)					1	2,299				
Newfoundland (a)	240	251,068			12	8,684				
Newfoundland (b)	266	18,715	4	344						
Cuba (a)										
Italy (a)	1	3,328								
St. Pierre (a)	7	3,749								
St. Pierre (b)	27	2,258								
Spain (a)	1	280			1	688				
United States (a)	16	16,751			4	3,817				
United States (b)	3	222	3	254						
Russia (a)										
British South Africa (a)	1	3,144								
Sea Fisheries (a)										
Sea Fisheries (b)	77	4,639	15	424						
Total	647	323,249	22	1,022	18	15,488				
Ocean Falls, B.C.—										
Great Britain (a)	13	49,980								
United States (a)	13	18,948	38	65,018						
Total	26	68,928	38	65,018						
Parrsboro, N.S.—										
Newfoundland (a)	1	1,698								
United States (a)	2	165	1	66	41	21,164				
United States (b)	44	12,536	7	2,183						
Total	47	14,399	8	2,249	41	21,164				
Paspebiac, Que.—										
Newfoundland (a)	1	520								
United States (a)			1	1,141						
United States (b)			1	343						
Total	1	520	2	1,484						

(a) Steam—Vapeurs. (b) Sail—Voiliers.

N° 12.—Relevé du nombre et du tonnage des long-courriers à voiles et à vapeur, déclarés *à l'entrée*, etc.—*Suite*

Denmark — Danemark		France — France		Germany — Allemagne		Netherlands — Pays-Bas		Japan — Japon		Other Nationalities — Autres nationalités			Total	
Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Flag — Pavillon	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	16	58,398
1	4,159	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	11,469
1	2,041	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	2,041
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	3,928
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	2,826
3	8,768	.....	.....	.....	.....	.....	.....	37	132,988	.....	.....	.....	47	163,332
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Italy.....	1	5,128	1	5,128
6	19,377	.....	.....	.....	.....	.....	.....	10	38,726	Panama...	1	912	142	348,830
										Italy.....	1	3,145	10	2,440
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	2,350
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	3,516
11	34,345	.....	.....	.....	.....	.....	.....	47	171,714	.....	3	9,185	224	604,258
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1,283
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	12
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	1,295
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	316
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	300	29,113
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	301	29,429
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Spain.....	1	498	9	19,593
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	2,299
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	252	259,752
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Spain.....	4	453	274	19,512
.....	.....	1	244	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	244
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	3,328
.....	.....	54	12,655	.....	.....	.....	.....	.....	.....	Spain.....	2	1,349	63	17,753
.....	.....	1	162	.....	.....	.....	.....	.....	.....	.....	.....	.....	28	2,420
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	968
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	20	20,568
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6	476
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Spain.....	1	2,572	1	2,572
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	3,144
.....	.....	133	38,164	.....	.....	.....	.....	.....	.....	Spain.....	21	11,926	154	50,090
.....	.....	1	155	.....	.....	.....	.....	.....	.....	.....	.....	.....	93	5,218
.....	.....	190	51,380	.....	.....	.....	.....	.....	.....	.....	29	16,798	906	407,937
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	13	49,980
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	51	83,966
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	64	133,946
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1,698
.....	.....	.....	.....	1	1,270	.....	.....	.....	.....	Lettonia....	1	1,263	46	23,928
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	51	14,719
.....	.....	.....	.....	1	1,270	.....	.....	.....	.....	.....	1	1,263	98	40,345
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	520
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1,141
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	343
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	2,004

No. 12.—Statement of the Number and Tonnage of Steam and Sailing Vessels entered Inwards *from Sea*, etc.—*Continued*

Ports and Outports and Countries whence Arrived — Ports et ports secondaires et pays de départ	Great Britain — Grande-Bretagne		United States — États-Unis		Norway — Norvège		Sweden — Suède		Belgium — Belgique	
	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
Pictou, N.S.—										
Newfoundland (a)	4	4,497								
St. Pierre (b)										
United States (a)	1	1,305	1	1,666	2	1,683	1	1,551		
Total	5	5,802	1	1,666	2	1,683	1	1,551		
Port Alberni, B.C.—										
Great Britain (a)	1	2,995								
China (a)										
Japan (a)	1	3,149			1	4,121				
United States (a)	1	3,156	11	23,862	1	2,939				
United States (b)			4	1,027						
Denmark (a)										
Sea Fisheries (a)	5	142	1	9						
Total	8	9,442	16	24,898	2	7,060				
Port Alfred, Que.—										
Great Britain (a)	5	10,921			1	727				
British West Indies (a)							1	1,311		
Newfoundland (a)					1	993	1	1,168		
Newfoundland (b)	1	99								
France (a)										
United States (a)	26	33,449	1	1,229	2	6,079				
Dutch Guiana (a)					6	8,960				
Greenland (a)					1	943				
Greece (a)										
Netherlands (a)										
Total	32	44,469	1	1,229	11	17,702	2	2,479		
Port Clyde, N.S.—										
United States (a)										
Port Elgin, N.B.—										
St. Pierre (b)	2	20								
Port Hastings, N.S.—										
British West Indies (a)					1	744				
Port Hawkesbury, N.S.—										
British West Indies (b)	1	397								
Newfoundland (a)	1	29								
Newfoundland (b)	15	1,119								
St. Pierre (b)	2	157	1	758						
United States (a)					3	2,358				
United States (b)	2	735	1	758						
Sea Fisheries (a)	18	2,686								
Sea Fisheries (b)	4	410								
Total	43	5,533	2	1,516	3	2,358				
Port La Tour, N.S.—										
Sea Fisheries (a)	2	28								
Port Mulgrave, N.S.—										
British Honduras (a)	1	2,192								
Port Wade, N.S.—										
United States (b)	2	190								
Powell River, B.C.—										
Japan (a)										
United States (a)	54	17,728	96	115,446	6	15,272				
United States (b)	7	1,934	2	209						
Australia (a)	14	53,094								
Argentina (a)			3	10,559	2	5,248				
Brazil (a)					1	2,485				
Total	75	72,756	101	126,234	9	23,005				

(a) Steam—Vapeurs. (b) Sail—Voiliers.

N° 12.—Relevé du nombre et du tonnage des long-courriers à voiles et à vapeur, déclarés *à l'entrée*, etc.—*Suite*

Denmark — Danemark		France — France		Germany — Allemagne		Netherlands — Pays-Bas		Japan — Japon		Other Nationalities — Autres nationalités			Total	
Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Flag — Pavillon	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
1	1,267												5	5,764
1	247												1	247
													5	6,205
2	1,514												11	12,216
													1	2,995
1	2,394												1	2,394
1	2,694							4	14,869				7	24,833
1	3,425												14	33,382
													4	1,027
1	2,747												1	2,747
													6	151
4	11,260							4	14,869				34	67,529
													6	11,648
													1	1,311
													2	2,161
													1	99
										Italy	5	15,484	5	15,484
2	6,048									Italy	1	3,817	32	50,622
4	6,675												10	15,635
													1	943
										Italy	1	3,145	1	3,145
						1	3,515						1	3,515
6	12,723					1	3,515				7	22,446	60	104,563
1	1,641												1	1,641
													2	20
													1	744
													1	397
													1	29
													15	1,119
													3	915
		1	2,546										4	4,904
													3	1,493
													18	2,686
													4	410
		1	2,546										49	11,953
													2	28
													1	2,192
													2	190
1	2,737												1	2,737
													156	148,466
													9	2,143
													14	53,094
													5	15,807
													1	2,485
1	2,737												186	224,732

No. 12.—Statement of the Number and Tonnage of Steam and Sailing Vessels entered Inwards *from Sea*, etc.—*Continued*

Ports and Outports and Countries whence Arrived — Ports et ports secondaires et pays de départ	Great Britain — Grande-Bretagne		United States — États-Unis		Norway — Norvège		Sweden — Suède		Belgium — Belgique	
	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
Prince Rupert, B.C.—										
Great Britain (a)	5	16,190					1	3,980		
France (a)	1	4,334								
Italy (a)	1	2,998								
United States (a)	152	139,788	193	33,943						
Japan (a)	1	3,889								
French Africa (a)	1	3,024								
Sea Fisheries (a)	994	10,732	1,237	31,704						
Total	1,155	180,955	1,430	65,647			1	3,980		
Quatsino, B.C.—										
Japan (a)										
From Sea (a)			1	19						
United States (a)	24	16,977	16	15,708						
Total	24	16,977	17	15,727						
Quebec, Que.—										
Great Britain (a)	255	1,912,599			2	3,908				
British West Indies (a)	15	28,976			2	3,296	2	2,622		
Newfoundland (a)	51	47,880			2	3,065				
Newfoundland (b)	2	298								
Belgium (a)	31	166,893			1	731				
France (a)	1	2,835			9	25,663				
Germany (a)	11	104,113			3	9,360				
Netherlands (a)					13	41,092				
Italy (a)	1	3,244			1	2,501				
Spain (a)	1	2,356								
United States (a)	8	28,685	4	11,881	6	11,304	1	1,853		
United States (b)			1	87						
Argentina (a)	4	12,890								
Australia (a)	1	3,242								
Canary Islands (a)	1	2,271								
Poland (a)										
French Africa (a)	2	5,972								
Dutch West Indies (a)	1	4,328								
Russia (a)										
Total	385	2,326,582	5	11,968	39	100,920	3	4,475		
Richibucto, N.B.—										
Newfoundland (a)					1	815				
Rimouski, Que.—										
Great Britain (a)	8	55,520								
Norway (a)					1	899				
United States (a)	1	1,204	2	2,458						
Total	9	56,724	2	2,458	1	899				
Riverport, N.S.—										
British West Indies (b)	1	323								
St. Pierre (a)	4	237								
United States (b)	1	387								
Sea Fisheries (a)	1	69								
Sea Fisheries (b)	50	4,941								
Total	57	5,957								
Salmon River, N.S...										
United States (b)	1	480								
Sandy Point, N.S.—										
British West Indies (b)	1	316								
Newfoundland (a)			1	73						
Newfoundland (b)			1	92						
St. Pierre (a)	1	35								
United States (a)	2	691	30	2,150						
United States (b)	1	35	2	1,064						
Sea Fisheries (a)	2	65	57	3,683						
Tlotal	7	1,142	91	7,062						

(a) Steam—Vapeurs. (b) Sail—Voiliers.

N° 12.—Relevé du nombre et du tonnage des long-courriers à voiles et à vapeur, déclarés *à l'entrée*, etc.—*Suite*

Denmark — Danemark		France — France		Germany — Allemagne		Netherlands — Pays-Bas		Japan — Japon		Other Nationalities — Autres nationalités			Total	
Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Flag — Pavillon	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
													6	20,170
													1	4,334
													1	2,998
													345	173,731
								2	10,253				3	14,142
													1	3,024
													2,231	142,436
								2	10,253				2,588	260,835
								4	17,210				4	17,210
													1	19
								1	4,038				41	36,723
								5	21,248				46	53,952
1	1,292	2	3,571			2	4,176						262	1,925,546
1	1,828												20	36,722
													53	50,945
													2	298
						1	1,876						33	169,500
										Italy	1	3,440	11	31,938
1	3,425			7	39,760					Russia	1	4,160	23	160,818
						6	21,469			Italy	1	5,976	20	68,537
										Italy	6	17,702	7	23,447
										Italy	1	3,512	2	5,868
5	8,086									Italy	4	12,501	28	74,310
													1	87
													4	12,890
													1	3,242
													1	2,271
1	3,819												1	3,819
													2	5,972
										Mexico	1	3,237	2	7,565
										Russia	1	4,160	1	4,160
9	18,450	2	3,571	7	39,760	9	27,521				15	54,688	474	2.587.935
													1	815
													8	55,520
													1	899
													3	3,662
													12	60,081
													1	323
													4	237
													1	387
													1	69
													50	4,941
													57	5,957
													1	480
													1	316
													1	73
													1	92
													1	35
													32	2,841
													3	1,099
													59	3,748
													98	8,204

No. 12.—STATEMENT of the Number and Tonnage of Steam and Sailing Vessels entered Inwards *from Sea*, etc.—*Continued*

Ports and Outports and Countries whence Arrived — Ports et ports secondaires et pays de départ	Great Britain — Grande-Bretagne		United States — États-Unis		Norway — Norvège		Sweden — Suède		Belgium — Belgique	
	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
Sheet Harbour, N.S.—										
Newfoundland (a)					3	2,478				
United States (a)					3	2,527	1	1,028		
Total					6	5,005	1	1,028		
Shelburne, N.S.—										
British West Indies (b)			1	73						
Newfoundland (a)	1	61	1	89						
United States (a)	3	440	36	2,295						
United States (b)			1	92						
Sea Fisheries (a)	4	140	50	3,522						
Total	8	641	89	6,071						
Sherbrooke, N.S.—										
Newfoundland (a)					1	611	2	1,770		
United States (b)	2	565	1	399						
Total	2	565	1	399	1	611	2	1,770		
Shippegan, N.B.—										
Sea Fisheries (b)	25	336								
Sidney, B.C.—										
Chile (a)			2	6,368	1	3,125				
United States (a)	77	16,620	503	157,801						
United States (b)	16	3,298	4	44						
Total	93	19,918	509	163,493	1	3,125				
Sorel, Que.—										
Great Britain (a)	1	1,203			1	2,574				
Chile (a)	1	3,135			1	4,119				
Sweden (a)					3	8,161				
United States (a)	1	3,205								
Total	3	7,543			5	14,854				
Souris, P.E.I.—										
Newfoundland (b)	3	232								
United States (a)					1	1,119				
United States (b)			1	92						
Total	3	232	1	92	1	1,119				
Steveston, B.C.—										
United States (a)	23	794	2	42						
Stewart, B.C.—										
United States (a)	76	49,436	8	6,281						
St. Andrews, N.B.—										
United States (a)	873	37,793	605	9,793						
United States (b)			1	166						
Total	873	37,793	606	9,959						
St. George, N.B.—										
United States (a)	20	201	39	678						
United States (b)	11	5,280	1	146						
Total	31	5,481	40	824						

(a) Steam—Vapeurs. (b) Sail—Voiliers.

N° 12.—Relevé du nombre et du tonnage des long-courriers à voiles et à vapeur, déclarés *à l'entrée*, etc.—*Suite*

Denmark — Danemark		France — France		Germany — Allemagne		Netherlands — Pays-Bas		Japan — Japon		Other Nationalities — Autres nationalités			Total	
Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Flag — Pavillon	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
													3	2,478
1	1,194												5	4,749
1	1,194												8	7,227
													1	73
													2	150
													39	2,735
													1	92
													54	3,662
													97	6,712
													3	2,381
													3	964
													6	3,345
													25	336
										[illegible]			3	9,493
													580	173,701
													20	3,342
													603	186,536
													2	3,777
													2	7,254
													3	8,161
													1	3,205
													8	22,397
													3	232
													1	1,119
													1	92
													5	1,443
													25	836
													84	55,717
													1,478	47,586
													1	166
													1,479	47,752
													59	879
													12	5,426
													71	6,305

No. 12—STATEMENT of the Number and Tonnage of Steam and Sailing Vessels entered Inwards *from Sea*, etc.—*Continued*

Ports and Outports and Countries whence Arrived — Ports et ports secondaires et pays de départ	Great Britain — Grande-Bretagne		United States — États-Unis		Norway — Norvège		Sweden — Suède		Belgium — Belgique	
	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
St. John, N.B.—										
Great Britain (a)	108	518,293	.....	.....	13	16,422	.....	.....	.....	.....
British West Indies (a)	36	104,465	.....	.....	7	8,276	4	4,758	.....	.....
British West Indies (b)	1	939	.....	.....	.....	.....	.....	.....	.....	.....
Newfoundland (a)	4	3,576	.....	.....	.....	.....	1	905	.....	.....
Belgium (a)	26	144,621	.....	.....	.....	.....	.....	.....	.....	.....
Cuba (a)	.....	.....	1	3,076	2	2,761	.....	.....	.....	.....
France (a)	6	33,200	.....	.....	3	8,034	.....	.....	.....	.....
Germany (a)	8	45,425	.....	.....	6	17,889	.....	.....	.....	.....
Netherlands (a)	6	18,534	.....	.....	6	19,488	.....	.....	.....	.....
Italy (a)	1	4,495	.....	.....	1	3,435	.....	.....	.....	.....
Norway (a)	.....	.....	.....	.....	3	8,161	.....	.....	.....	.....
San Domingo (a)	.....	.....	.....	.....	1	883	.....	.....	.....	.....
St. Pierre (a)	.....	.....	.....	.....	1	571	.....	.....	.....	.....
Spain (a)	.....	.....	.....	.....	1	2,366	.....	.....	.....	.....
United States (a)	180	77,348	499	132,053	29	32,628	2	2,524	.....	.....
United States (b)	65	30,585	82	26,658	.....	.....	.....	.....	.....	.....
Azores and Madeira (a)	1	2,708	.....	.....	.....	.....	.....	.....	.....	.....
Argentina (a)	4	12,854	.....	.....	.....	.....	.....	.....	.....	.....
British East Africa (a)	1	1,914	.....	.....	.....	.....	.....	.....	.....	.....
British South Africa (a)	1	2,175	.....	.....	.....	.....	.....	.....	.....	.....
Hayti (a)	.....	.....	.....	.....	1	673	.....	.....	.....	.....
Greece (a)	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Sea Fisheries (a)	7	57	.....	.....	.....	.....	.....	.....	.....	.....
Total	455	1,001,189	582	161,787	74	121,587	7	8,187	.....	.....
St. Peters, N.S.—										
Newfoundland (a)	1	926	.....	.....	.....	.....	.....	.....	.....	.....
United States (a)	1	32	.....	.....	.....	.....	.....	.....	.....	.....
Total	2	958	.....	.....	.....	.....	.....	.....	.....	.....
St. Stephen, N.B.—										
Great Britain (a)	.....	.....	.....	.....	2	1,393	.....	.....	.....	.....
United States (a)	7	84	2	51	.....	.....	.....	.....	.....	.....
United States (b)	.....	.....	3	1,776	.....	.....	.....	.....	.....	.....
Total	7	84	5	1,827	2	1,393	.....	.....	.....	.....
Summerside, P.E.I.—										
British West Indies (a)	.....	.....	.....	.....	1	1,358	.....	.....	.....	.....
Newfoundland (a)	1	1,305	.....	.....	.....	.....	.....	.....	.....	.....
United States (a)	.....	.....	.....	.....	3	3,676	.....	.....	.....	.....
United States (b)	5	2,466	.....	.....	.....	.....	.....	.....	.....	.....
Total	6	3,771	.....	.....	4	5,034	.....	.....	.....	.....
Sydney, N.S.—										
Great Britain (a)	26	76,696	.....	.....	4	5,179	.....	.....	.....	.....
British West Indies (a)	1	1,451	.....	.....	1	941	.....	.....	.....	.....
British West Indies (b)	1	190	.....	.....	.....	.....	.....	.....	.....	.....
Newfoundland (a)	48	68,646	.....	.....	92	281,213	1	905	.....	.....
Newfoundland (b)	16	1,666	1	15	.....	.....	.....	.....	.....	.....
Cuba (a)	2	5,257	.....	.....	.....	.....	.....	.....	.....	.....
Germany (b)	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Netherlands (a)	1	1,286	.....	.....	.....	.....	.....	.....	.....	.....
Italy (a)	3	9,677	.....	.....	.....	.....	.....	.....	.....	.....
Norway (a)	.....	.....	.....	.....	5	19,445	.....	.....	.....	.....
St. Pierre (a)	2	999	.....	.....	3	2,102	.....	.....	.....	.....
Spain (a)	2	4,498	.....	.....	.....	.....	.....	.....	.....	.....
United States (a)	13	24,750	1	470	5	7,089	1	905	.....	.....
United States (b)	1	99	.....	.....	.....	.....	.....	.....	.....	.....
Portugal (a)	1	3,043	.....	.....	.....	.....	.....	.....	.....	.....
Argentina (a)	2	5,955	.....	.....	.....	.....	.....	.....	.....	.....
Greece (a)	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
French Africa (a)	2	4,959	.....	.....	.....	.....	.....	.....	.....	.....
British South Africa (a)	4	12,464	.....	.....	.....	.....	1	2,460	.....	.....
British India (a)	1	1,904	.....	.....	.....	.....	.....	.....	.....	.....
Sea Fisheries (a)	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Sea Fisheries (b)	.....	.....	38	974	.....	.....	.....	.....	.....	.....
Total	126	223,540	40	1,459	110	315,969	3	4,270	.....	.....

(a) Steam—Vapeurs. (b) Sail—Voiliers.

N° 12.—RELEVÉ du nombre et du tonnage des long-courriers à voiles et à vapeur, déclarés *à l'entrée*, etc.—*Suite*

Denmark — Danemark		France — France		Germany — Allemagne		Netherlands — Pays-Bas		Japan — Japon		Other Nationalities — Autres nationalités			Total	
Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Flag — Pavillon	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
.....	.....	.....	.....	1	943	.....	.....	.....	.....	.....	.....	.....	122	535,658
1	724	.....	.....	3	2,849	2	2,258	.....	.....	.....	.....	.....	53	123,330
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	939
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5	4,481
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	26	144,621
1	1,188	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4	7,025
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	9	41,234
.....	.....	.....	.....	5	18,888	.....	.....	.....	.....	Italy.....	1	3,997	20	86,199
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Italy.....	1	3,364	13	41,386
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Italy.....	22	75,208	24	83,138
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	8,161
1	1,181	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	2,064
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	571
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	2,366
10	12,931	.....	.....	5	8,178	2	4,209	1	4,254	Italy.....	6	20,200	734	294,325
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	147	57,243
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	2,708
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4	12,854
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1,914
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Italy.....	1	3,078	2	5,253
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	673
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Greece.....	1	3,120	1	3,120
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	7	57
13	16,024	.....	.....	14	30,858	4	6,467	1	4,254	.....	32	108,967	1,182	1,459,320
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	926
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	32
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	958
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	1,393
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	9	135
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	1,776
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	14	3,304
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1,358
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1,305
1	1,475	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4	5,151
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5	2,466
1	1,475	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	11	10,280
.....	.....	.....	.....	.....	.....	.....	.....	1	4,254	.....	.....	.....	31	86,129
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	2,392
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	190
.....	.....	.....	.....	.....	.....	1	1,533	.....	.....	.....	.....	.....	142	352,297
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	17	1,681
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	5,257
.....	.....	.....	.....	.....	.....	1	2,987	.....	.....	.....	.....	.....	1	2,987
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1,286
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	9,677
.....	.....	.....	.....	.....	.....	1	3,516	.....	.....	.....	.....	.....	6	22,961
.....	.....	2	526	.....	.....	.....	.....	.....	.....	Spain.....	2	715	9	4,342
.....	.....	.....	.....	1	1,129	.....	.....	.....	.....	.....	.....	.....	3	5,627
.....	.....	.....	.....	.....	.....	1	3,148	.....	.....	.....	.....	.....	21	36,362
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	99
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	3,043
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	5,955
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Greece.....	1	175	1	175
.....	.....	1	1,986	.....	.....	.....	.....	.....	.....	Italy.....	1	3,384	2	4,959
.....	.....	7	1,814	.....	.....	.....	.....	.....	.....	Spain.....	3	1,497	7	20,294
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1,904
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	10	3,311
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	38	974
.....	.....	10	4,326	1	1,129	4	11,184	1	4,254	.....	7	5,771	302	571,902

No. 12.—STATEMENT of the Number and Tonnage of Steam and Sailing Vessels entered Inwards *from Sea*, etc.—*Continued*

Ports and Outports and Countries whence Arrived — Ports et ports secondaires et pays de départ	Great Britain — Grande-Bretagne		United States — États-Unis		Norway — Norvège		Sweden — Suède		Belgium — Belgique	
	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
Three Rivers, Que.—										
Great Britain (a)	35	104,116	1	3,185	12	27,811	.....	.....	.....	.....
Belgium (a)	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Germany (a)	.....	.....	.....	.....	1	3,054	.....	.....	.....	.....
Netherlands (a)	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
United States (a)	1	3,361	.....	.....	3	7,678	.....	.....	.....	.....
Total	36	107,477	1	3,185	16	38,543	.....	.....	.....	.....
Truro, N.S.—										
United States (b)	1	140	.....	.....	.....	.....	.....	.....	.....	.....
Union Bay, B.C.—										
Great Britain (a)	1	2,809	.....	.....	.....	.....	.....	.....	.....	.....
Japan (a)	2	7,887	.....	.....	.....	.....	.....	.....	.....	.....
United States (a)	14	19,169	39	1,779	1	2,936	.....	.....	.....	.....
United States (b)	2	531	.....	.....	.....	.....	.....	.....	.....	.....
British Oceania (a)	1	3,525	.....	.....	.....	.....	.....	.....	.....	.....
Russia (a)	2	5,131	.....	.....	.....	.....	.....	.....	.....	.....
Total	22	39,052	39	1,779	1	2,936	.....	.....	.....	.....
Vancouver, B.C.—										
Great Britain (a)	155	554,389	1	4,282	1	2,724	2	6,691	.....	.....
Chile (a)	1	3,150	.....	.....	1	2,565	1	3,151	.....	.....
British West Indies (a)	1	3,375	.....	.....	.....	.....	.....	.....	.....	.....
Belgium (a)	7	18,147	.....	.....	15	62,303	1	3,381	.....	.....
China (a)	11	39,036	11	47,876	5	13,762	1	3,631	.....	.....
Cuba (a)	1	3,154	.....	.....	.....	.....	.....	.....	.....	.....
France (a)	2	6,521	.....	.....	.....	.....	.....	.....	.....	.....
Germany (a)	.....	.....	.....	.....	1	2,516	.....	.....	.....	.....
Netherlands (a)	19	98,471	.....	.....	.....	.....	5	18,239	.....	.....
Denmark (a)	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Italy (a)	16	50,821	.....	.....	.....	.....	.....	.....	.....	.....
Norway (a)	.....	.....	.....	.....	1	4,493	.....	.....	.....	.....
Japan (a)	60	306,781	5	21,452	13	43,870	1	3,655	1	3,072
Brazil (a)	.....	.....	.....	.....	2	4,968	.....	.....	.....	.....
Colombia (a)	1	5,144	.....	.....	.....	.....	.....	.....	.....	.....
Uruguay (a)	.....	.....	.....	.....	1	2,327	.....	.....	.....	.....
Ceylon (a)	1	3,136	.....	.....	.....	.....	.....	.....	.....	.....
Hawaii (a)	.....	.....	.....	.....	.....	.....	1	3,446	.....	.....
Spain (a)	1	3,039	.....	.....	.....	.....	.....	.....	.....	.....
Sweden (a)	.....	.....	.....	.....	.....	.....	8	22,993	.....	.....
United States (a)	1,000	1,482,318	518	988,059	14	44,424	9	28,240	.....	.....
United States (b)	.....	.....	13	1,932	.....	.....	.....	.....	.....	.....
Peru (a)	4	18,130	1	3,888	4	10,816	.....	.....	.....	.....
Costa Rica (a)	1	2,350	.....	.....	.....	.....	.....	.....	.....	.....
British Straits Settlements (a)	1	3,136	.....	.....	.....	.....	.....	.....	.....	.....
Australia (a)	22	155,159	.....	.....	.....	.....	.....	.....	.....	.....
New Zealand (a)	4	14,753	1	3,339	.....	.....	.....	.....	.....	.....
Mexico (a)	11	13,262	.....	.....	.....	.....	.....	.....	.....	.....
Dutch East Indies (a)	2	5,478	.....	.....	.....	.....	.....	.....	.....	.....
Portugal (a)	1	2,877	.....	.....	.....	.....	.....	.....	.....	.....
Fiji Islands (a)	8	28,447	.....	.....	.....	.....	.....	.....	.....	.....
Argentina (a)	2	4,831	6	21,349	8	21,276	.....	.....	.....	.....
Jugo-Slavia (a)	1	3,002	.....	.....	.....	.....	.....	.....	.....	.....
Egypt (a)	4	12,398	.....	.....	.....	.....	.....	.....	.....	.....
Hong Kong (a)	18	128,545	.....	.....	.....	.....	.....	.....	.....	.....
French Africa (a)	10	35,165	.....	.....	.....	.....	.....	.....	.....	.....
Sea Fisheries (a)	175	2,867	1	70	.....	.....	.....	.....	.....	.....
Total	1,540	3,007,882	557	1,092,247	66	216,044	29	93,427	1	3,072

(a) Steam—Vapeurs. (b) Sail—Voiliers.

N° 12.—Relevé du nombre et du tonnage des long-courriers à voiles et à vapeur, déclarés *à l'entrée*, etc.—*Suite*

Denmark — Danemark		France — France		Germany — Allemagne		Netherlands — Pays-Bas		Japan — Japon		Other Nationalities — Autres nationalités			Total	
Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Flag — Pavillon	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
1	1,318												49	136,430
				1	1,927								1	1,927
				1	1,899								2	4,953
						2	4,163						2	4,163
1	2,303									Italy	1	3,184	6	16,526
2	3,621			2	3,826	2	4,163				1	3,184	60	163,999
													1	140
													1	2,809
													2	7,887
						1	4,543						55	28,427
													2	531
													1	3,525
													2	5,131
						1	4,543						63	48,310
2	8,480					5	23,336						166	599,902
													3	8,866
													1	3,375
				10	41,095	11	52,671						44	177,597
2	7,796			1	4,048			12	50,185	China	1	5,115	44	171,449
1	1,100												2	4,254
		22	80,360										24	86,881
1	3,583			26	102,112								28	108,211
1	3,425					7	39,361						32	159,496
9	37,883												9	37,883
										Italy	14	62,050	30	112,871
													1	4,493
14	42,830							156	646,435	China	24	92,443	274	1,160,538
													2	4,968
													1	5,144
													1	2,327
													1	3,136
													1	3,446
													1	3,039
						1	3,515						9	26,508
9	24,386			1	4,887			68	273,709	Panama	2	1,824	1,627	2,869,354
										Italy	3	10,976		
										China	3	10,531	13	1,932
													9	32,834
													1	2,350
													1	3,136
													22	155,159
													5	18,092
													11	13,262
													2	5,478
										Spain	1	3,374	2	6,251
													8	28,447
													16	47,456
													1	3,002
													4	12,398
													18	128,545
													10	35,165
													176	2,937
39	129,483	22	80,360	38	152,142	24	118,883	236	970,329		48	186,313	2,600	6,050,182

No. 12.—STATEMENT of the Number and Tonnage of Steam and Sailing Vessels entered Inwards *from Sea*, etc.—*Concluded*

Ports and Outports and Countries whence Arrived — Ports et ports secondaires et pays de départ	Great Britain — Grande-Bretagne		United States — États-Unis		Norway — Norvège		Sweden — Suède		Belgium — Belgique	
	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
Victoria, B.C.—										
Great Britain (a)	43	17,144	.....	.....	.....	.....	.....	.....	.....	.....
Australia (a)	8	73,260	.....	.....	.....	.....	.....	.....	.....	.....
New Zealand (a)	6	49,634	.....	.....	.....	.....	.....	.....	.....	.....
Belgium (a)	.....	.....	.....	.....	3	12,186	.....	.....	.....	.....
China (a)	19	146,401	8	67,171	.....	.....	.....	.....	.....	.....
Netherlands (a)	8	12,051	.....	.....	.....	.....	.....	.....	.....	.....
Japan (a)	18	150,149	17	134,358	3	9,500	.....	.....	.....	.....
From Sea (a)	25	902	12	4,553	.....	.....	.....	.....	.....	.....
Mexico (a)	1	30	.....	.....	.....	.....	.....	.....	.....	.....
Spain (a)	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
United States (a)	821	977,835	1,134	1,592,136	2	3,771	1	3,655	.....	.....
United States (b)	247	46,947	28	14,205	.....	.....	.....	.....	.....	.....
Total	1,196	1,474,353	1,199	1,812,423	8	25,457	1	3,655	.....	.....
Westport, N.S.—										
St. Pierre (a)	1	32	.....	.....	.....	.....	.....	.....	.....	.....
United States (a)	9	288	19	223	.....	.....	.....	.....	.....	.....
United States (b)	1	142	.....	.....	.....	.....	.....	.....	.....	.....
Total	11	462	19	223	.....	.....	.....	.....	.....	.....
Weymouth, N.S.—										
United States (a)	.....	.....	.....	.....	7	927	.....	.....	.....	.....
United States (b)	20	3,570	.....	.....	.....	.....	.....	.....	.....	.....
Total	20	3,570	.....	.....	7	927	.....	.....	.....	.....
White Rock, B.C.—										
United States (a)	4	172	.....	.....	.....	.....	.....	.....	.....	.....
Windsor, N.S.—										
Germany (a)	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
United States (a)	104	197,272	.....	.....	52	48,585	.....	.....	.....	.....
United States (b)	16	4,069	12	7,669	.....	.....	.....	.....	.....	.....
Total	120	201,341	12	7,669	52	48,585	.....	.....	.....	.....
Wolfville, N.S.—										
United States (b)	6	1,219	.....	.....	.....	.....	.....	.....	.....	.....
Yarmouth, N.S.—										
British West Indies (b)	2	817	.....	.....	.....	.....	.....	.....	.....	.....
St. Pierre (b)	31	1,997	.....	.....	.....	.....	.....	.....	.....	.....
United States (a)	33	30,756	144	381,206	9	3,861	.....	.....	.....	.....
United States (b)	18	5,511	46	1,610	.....	.....	.....	.....	.....	.....
Sea Fisheries (a)	31	1,742	47	2,481	.....	.....	.....	.....	.....	.....
Total	115	40,823	237	385,297	9	3,861	.....	.....	.....	.....
York Factory, Man.—										
Newfoundland (a)	1	1,115	.....	.....	.....	.....	.....	.....	.....	.....

(a) Steam—Vapeurs. (b) Sail—Voiliers.

N° 12.—RELEVÉ du nombre et du tonnage des long-courriers à voiles et à vapeur, déclarés *à l'entrée*, etc.—*Fin*

Denmark — Danemark		France — France		Germany — Allemagne		Netherlands — Pays-Bas		Japan — Japon		Other Nationalities — Autres nationalités			Total	
Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Flag — Pavillon	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
.....	.....	.....	.....	.....	.....	2	10,874	.....	.....	.....	.....	.....	45	28,018
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	8	73,260
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6	49,634
.....	.....	.....	.....	.....	.....	6	30,269	.....	.....	.....	.....	.....	9	42,455
.....	.....	.....	.....	.....	.....	.....	.....	12	58,477	.....	.....	.....	39	272,049
.....	.....	.....	.....	.....	.....	6	28,818	.....	.....	.....	.....	.....	14	40,869
1	3,637	.....	.....	.....	.....	.....	.....	43	200,215	.....	.....	.....	82	497,859
.....	.....	.....	.....	.....	.....	.....	.....	1	3,302	.....	.....	.....	38	8,757
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	30
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Italy.....	1	4,455	1	4,455
1	1,100	.....	.....	1	4,853	.....	.....	43	206,029	Undocumented...	1	1,284	2,004	2,790,663
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	275	61,152
2	4,737	.....	.....	1	4,853	14	69,961	99	468,023	.....	2	5,739	2,522	3,869,201
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	32
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	28	511
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	142
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	30	685
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	7	927
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	20	3,570
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	27	4,497
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4	172
.....	.....	.....	.....	1	1,091	.....	.....	.....	.....	.....	.....	.....	1	1,091
.....	.....	.....	.....	1	813	.....	.....	.....	.....	.....	.....	.....	157	246,670
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	28	11,738
.....	.....	.....	.....	2	1,904	.....	.....	.....	.....	.....	.....	.....	186	259,499
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6	1,219
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	817
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	31	1,997
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	186	415,823
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	64	7,121
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	78	4,223
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	361	429,981
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1,115

No. 13.—Summary Statement of the Nationality of Sea-going Vessels entered Inwards *from Sea* from each Country

No.	Countries from which arrived — Pays de départ	Great Britain — Grande-Bretagne		United States — États-Unis		Norway — Norvège		Sweden — Suède		Belgium — Belgique	
		Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
1	Great Britain	1,245	6,482,032	5	15,349	73	102,331	6	15,113	.....	.....
2	Australia	77	410,165	.....	.....	.....	.....	.....	.....	.....	.....
3	British East Africa	1	1,914	.....	.....	.....	.....	.....	.....	.....	.....
4	British South Africa	20	65,881	.....	.....	.....	.....	1	2,460	.....	.....
5	British Honduras	1	2,192	.....	.....	.....	.....	.....	.....	.....	.....
6	British India	23	80,482	3	10,821	.....	.....	.....	.....	.....	.....
7	British West Indies	191	350,270	1	816	42	52,911	31	35,113	.....	.....
8	British Oceania	1	3,525	.....	.....	.....	.....	.....	.....	.....	.....
9	British Straits Settlements	1	3,136	.....	.....	.....	.....	.....	.....	.....	.....
10	Ceylon	1	3,136	.....	.....	.....	.....	.....	.....	.....	.....
11	Fiji Islands	8	28,447	.....	.....	.....	.....	.....	.....	.....	.....
12	Gibraltar	1	2,337	.....	.....	.....	.....	.....	.....	1	3,106
13	Hong Kong	18	128,545	.....	.....	.....	.....	.....	.....	.....	.....
14	Irish Free State	3	8,453	.....	.....	1	2,293	.....	.....	.....	.....
15	Newfoundland	974	706,718	15	4,297	133	322,778	5	4,748	.....	.....
16	New Zealand	17	87,429	1	3,339	.....	.....	.....	.....	.....	.....
17	Argentina	21	63,629	10	35,424	14	37,196	1	2,870	.....	.....
18	Azores and Madeira	1	2,708	.....	.....	.....	.....	.....	.....	.....	.....
19	Belgium	130	743,368	.....	.....	26	80,619	1	3,381	.....	.....
20	Brazil	3	10,433	.....	.....	3	7,453	.....	.....	.....	.....
21	Canary Islands	1	2,271	.....	.....	.....	.....	.....	.....	.....	.....
22	Chili	3	9,420	2	6,368	4	13,928	1	3,151	.....	.....
23	China	31	188,428	20	119,366	5	13,762	1	3,631	.....	.....
24	Colombia	21	131,973	17	93,648	.....	.....	.....	.....	.....	.....
25	Costa Rica	2	4,700	.....	.....	.....	.....	.....	.....	.....	.....
26	Cuba	6	13,347	1	3,076	7	7,896	1	1,020	.....	.....
27	Denmark	.....	.....	.....	.....	3	1,957	.....	.....	.....	.....
28	Dutch Guiana	.....	.....	.....	.....	6	8,960	.....	.....	.....	.....
29	Dutch East Indies	2	5,478	.....	.....	.....	.....	.....	.....	.....	.....
30	Dutch West Indies	2	11,173	4	23,993	.....	.....	.....	.....	.....	.....
31	Egypt	8	25,626	.....	.....	.....	.....	.....	.....	.....	.....
32	France	18	83,570	.....	.....	22	61,752	.....	.....	.....	.....
33	French Africa	26	83,412	.....	.....	.....	.....	.....	.....	.....	.....
34	Germany	41	250,150	4	15,248	25	71,541	3	8,351	.....	.....
35	Greece	1	175	.....	.....	.....	.....	.....	.....	.....	.....
36	Greenland	.....	.....	.....	.....	1	943	.....	.....	.....	.....
37	Hawaii	.....	.....	.....	.....	.....	.....	1	3,446	.....	.....
38	Hayti	.....	.....	.....	.....	1	673	.....	.....	.....	.....
39	Italy	48	157,919	.....	.....	2	5,936	.....	.....	.....	.....
40	Japan	89	493,830	22	155,810	20	65,637	1	3,655	1	3,072
41	Jugo-Slavia	1	3,002	.....	.....	.....	.....	.....	.....	.....	.....
42	Mexico	15	29,024	.....	.....	1	2,147	.....	.....	.....	.....
43	Miquelon and St. Pierre	201	25,122	1	758	13	8,964	.....	.....	.....	.....
44	Netherlands	37	139,817	.....	.....	32	101,671	5	18,239	.....	.....
45	Norway	.....	.....	.....	.....	42	193,457	.....	.....	.....	.....
46	Peru	26	142,030	1	3,888	4	10,816	.....	.....	.....	.....
47	Poland	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
48	Porto Rico	1	1,428	.....	.....	.....	.....	.....	.....	.....	.....
49	Portugal	7	18,146	.....	.....	.....	.....	1	1,673	.....	.....
50	Russia	4	9,675	.....	.....	.....	.....	.....	.....	.....	.....
51	San Domingo	3	5,640	.....	.....	3	2,498	.....	.....	.....	.....
52	Spain	7	13,968	1	84	5	5,692	.....	.....	.....	.....
53	Sweden	.....	.....	.....	.....	7	17,241	36	243,970	.....	.....

N° 13.—ÉTAT SOMMAIRE de la nationalité des long-courriers de chaque pays, déclarés *à l'entrée*

Danemark — Danemark		France — France		Germany — Allemagne		Netherlands — Pays-Bas		Japan — Japon		Other Nationalities — Autres nationalités			Total		
Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Flag — Pavillon	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	No.
16	26,211	8	16,397	4	4,184	21	63,522	1	4,254	Italy	6	17,048	1,395	6,769,403	1
										Spain	3	4,206			
										Jugo Slavia	1	3,783			
										Greece	6	14,973			
....	.....	....	.....	....	.....	....	.....	....	.....	.....	.....	.....	77	410,165	2
....	.....	....	.....	....	.....	....	.....	....	.....	.....	.....	.....	1	1,914	3
....	.....	3	6,744	....	.....	....	.....	....	.....	Italy	2	6,462	26	81,547	4
....	.....	....	.....	....	.....	....	.....	....	.....	.....	.....	.....	1	2,192	5
....	.....	....	.....	....	.....	....	.....	....	.....	.....	.....	.....	26	91,303	6
11	15,804	1	147	5	4,885	4	4,516	....	.....	Greece	1	2,646	287	467,108	7
....	.....	....	.....	....	.....	....	.....	1	3,752	.....	.....	.....	2	7,277	8
....	.....	....	.....	....	.....	....	.....	....	.....	.....	.....	.....	1	3,136	9
....	.....	....	.....	....	.....	....	.....	....	.....	.....	.....	.....	1	3,136	10
....	.....	....	.....	....	.....	....	.....	....	.....	.....	.....	.....	8	28,447	11
....	.....	....	.....	....	.....	....	.....	....	.....	Spain	1	3,389	5	15,782	12
										Italy	2	6,950			
....	.....	....	.....	....	.....	....	.....	....	.....	.....	.....	.....	18	128,545	13
....	.....	....	.....	....	.....	....	.....	....	.....	.....	.....	.....	4	10,746	14
2	2,409	....	.....	....	.....	1	1,533	....	.....	Spain	4	453	1,134	1,042,936	15
....	.....	....	.....	....	.....	....	.....	....	.....	.....	.....	.....	18	90,768	16
....	.....	....	.....	....	.....	....	.....	....	.....	Italy	2	5,984	49	147,740	17
										Greece	1	2,637			
1	1,292	....	.....	....	.....	....	.....	....	.....	.....	.....	.....	2	4,000	18
....	.....	....	.....	11	43,022	20	89,048	....	.....	Italy	2	7,804	191	969,465	19
										Greece	1	2,223			
....	.....	....	.....	....	.....	....	.....	....	.....	.....	.....	.....	6	17,886	20
....	.....	....	.....	....	.....	....	.....	....	.....	.....	.....	.....	1	2,271	21
....	.....	....	.....	....	.....	....	.....	....	.....	.....	.....	.....	10	32,867	22
5	18,508	....	.....	1	4,048	....	.....	24	108,662	China	1	5,115	88	461,520	23
....	.....	....	.....	....	.....	....	.....	....	.....	Poland	3	15,309	41	240,930	24
....	.....	....	.....	....	.....	....	.....	....	.....	.....	.....	.....	2	4,700	25
5	9,263	1	244	....	.....	....	.....	....	.....	.....	.....	.....	21	34,846	26
62	327,902	....	.....	....	.....	....	.....	....	.....	.....	.....	.....	65	329,859	27
4	6,675	....	.....	....	.....	....	.....	....	.....	.....	.....	.....	10	15,635	28
....	.....	....	.....	....	.....	....	.....	....	.....	.....	.....	.....	2	5,478	29
....	.....	....	.....	....	.....	....	.....	....	.....	Poland	1	5,107	8	43,510	30
										Mexico	1	3,237			
....	.....	....	.....	....	.....	....	.....	....	.....	Jugo Slavia	1	3,296	9	28,922	31
....	.....	37	148,104	....	.....	....	.....	....	.....	Italy	7	22,364	89	329,871	32
										Greece	5	14,081			
....	.....	....	.....	....	.....	....	.....	1	4,280	Italy	5	17,852	35	113,237	33
										Greece	3	7,693			
4	13,858	....	.....	95	478,282	5	12,265	1	4,259	Italy	4	15,026	183	873,140	34
										Russia	1	4,160			
....	.....	....	.....	....	.....	....	.....	....	.....	Italy	2	6,140	12	31,664	35
....	.....	....	.....	....	.....	....	.....	....	.....	Greece	9	25,349			
....	.....	....	.....	....	.....	....	.....	....	.....	.....	.....	.....	1	943	36
....	.....	....	.....	....	.....	....	.....	....	.....	.....	.....	.....	1	3,446	37
....	.....	....	.....	....	.....	....	.....	....	.....	.....	.....	.....	1	673	38
....	.....	....	.....	....	.....	1	2,132	....	.....	Italy	78	278,667	135	461,384	39
										Greece	6	16,730			
21	63,019	....	.....	....	.....	....	.....	254	1,052,255	China	24	92,443	432	1,929,721	40
....	.....	....	.....	....	.....	....	.....	....	.....	.....	.....	.....	1	3,002	41
....	.....	....	.....	....	.....	....	.....	....	.....	Mexico	1	3,236	17	34,407	42
1	247	68	17,263	....	.....	....	.....	....	.....	Spain	5	2,562	289	54,916	43
1	3,425	1	3,656	....	.....	76	373,595	1	4,280	Italy	7	27,353	166	689,850	44
										Spain	1	3,374			
										Jugo Slavia	1	3,927			
										Greece	4	10,513			
....	.....	....	.....	....	.....	1	3,516	....	.....	.....	.....	.....	43	196,973	45
....	.....	....	.....	....	.....	....	.....	....	.....	Poland	1	5,002	32	161,736	46
1	3,819	....	.....	....	.....	....	.....	....	.....	Italy	1	4,416	2	8,235	47
....	.....	....	.....	....	.....	....	.....	....	.....	.....	.....	.....	1	1,428	48
....	.....	....	.....	....	.....	....	.....	....	.....	Italy	1	3,214	14	36,033	49
										Greece	4	9,626			
....	.....	....	.....	....	.....	....	.....	....	.....	Spain	1	3,374	6	16,407	50
										Spain	1	2,572			
										Russia	1	4,160			
2	2,471	....	.....	....	.....	....	.....	....	.....	.....	.....	.....	8	10,609	51
....	.....	1	442	1	1,129	....	.....	....	.....	Spain	1	498	22	42,665	52
										Italy	4	16,405			
										Greece	2	4,447			
....	.....	....	.....	....	.....	1	3,515	....	.....	.....	.....	.....	44	264,726	53

No. 13.—Summary Statement of the Nationality of Sea-going Vessels entered Inwards *from Sea*, form each Country—*Concluded*

No.	Countries from which arrived — Pays de départ	Great Britain — Grande-Bretagne		United States — États-Unis		Norway — Norvège		Sweden — Suède		Belgium — Belgique	
		Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
54	Turkey	1	3,257	.....	.....	.....	.....	.....	.....	.....	.....
55	United States	6,170	470,943	6,055	4,232,722	310	400,232	40	138,818	.....	.....
56	Uruguay	.....	.....	.....	.....	1	2,327	.....	.....	.....	.....
57	Venezuela	2	8,414	.....	.....	.....	.....	.....	.....	.....	.....
58	From Sea	90	22,148	55	4,846	.....	.....	.....	.....	.....	.....
59	Sea Fisheries	2,504	125,096	1,746	51,885	.....	.....	.....	.....	.....	.....
	Total	12,105	15,896,982	7,964	4,781,738	806	1,603,611	135	489,639	2	6,178

N° 13.—ÉTAT SOMMAIRE de la nationalité des long-courriers de chaque pays, déclarés *à l'entrée—Fin*

Denmark — Danemark		France — France		Germany — Allemagne		Netherlands — Pays-Bas		Japan — Japon		Other Nationalities — Autres nationalités			Total		
Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Flag — Pavillon	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	No.
....	.....	....	.....	....	.....	....	.....	....	.....	.....	.....	.....	1	3,257	54
										Panama.....	3	2,736			
										Italy.....	29	100,320			
										Lettonia.....	1	1,263			
62	155,603	4	9,407	9	20,001	28	51,422	129	551,274	China.....	3	10,531	12847	10,387,548	55
										Undocumented	1	1,284			
										Spain.....	1	3,409			
										Greece.....	2	4,583			
....	.....	....	.....	....	.....	....	.....	....	.....	.....	.....	.....	1	2,327	56
....	.....	....	.....	....	.....	1	4,237	....	.....	Mexico.....	1	3,237	4	15,888	57
....	.....	12	12,576	....	.....	....	.....	1	3,302	.....	.....	.....	158	42,872	58
....	.....	201	61,404	....	.....	....	.....	....	.....	Spain.....	26	14,781	4,477	253,166	59
198	650,506	337	276,384	126	555,551	159	609,301	413	1,736,318	.....	286	857,950	22,531	27,464,158	

TRADE WITH EACH COUNTRY AND NATIONALITY OF VESSELS

No. 14.—STATEMENT of the Number and Tonnage of Steam and Sailing Vessels entered Outwards *for Sea* at each of the undermentioned Ports and Outports in Canada, for foreign countries distinguishing the Nationality of the Vessels employed in the trade with each country.

Ports and Outports and Countries for which Departed — Ports et ports secondaires et pays de destination	Great Britain — Grande-Bretagne		United States — États-Unis		Norway — Norvège		Sweden — Suède		Belgium — Belgique	
	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
Albert, N.-B.—										
United States (b)	.....	.....	2	699	.....	.....	.....	.....	.....	.....
Alert Bay, B.C.—										
United States (a)	9	1,501	43	4,299	.....	.....	.....	.....	.....	.....
Sea Fisheries (a)	12	188	12	248	.....	.....	.....	.....	.....	.....
Total	21	1,689	55	4,547	.....	.....	.....	.....	.....	.....
Amherst, N.S.—										
Newfoundland (a)	1	223	.....	.....	.....	.....	.....	.....	.....	.....
Newfoundland (b)	2	216	.....	.....	.....	.....	.....	.....	.....	.....
Total	3	439	.....	.....	.....	.....	.....	.....	.....	.....
Annapolis Royal, N.S.—										
United States (b)	10	1,001	.....	.....	.....	.....	.....	.....	.....	.....
Antigonish, N.S.—										
United States (a)	.....	.....	.....	.....	1	671	.....	.....	.....	.....
Anyox, B.C.—										
United States (a)	59	79,476	3	5,779	.....	.....	.....	.....	.....	.....
Arichat, N.S.—										
United States (a)	.....	.....	1	300	.....	.....	.....	.....	.....	.....
Sea Fisheries (b)	21	369	18	388	.....	.....	.....	.....	.....	.....
Total	21	369	19	688	.....	.....	.....	.....	.....	.....
Baddeck, N.S.—										
St. Pierre (b)	2	60	.....	.....	.....	.....	.....	.....	.....	.....
United States (a)	.....	.....	1	1,658	10	11,105	.....	.....	.....	.....
United States (b)	4	1,371	1	498	.....	.....	.....	.....	.....	.....
Sea Fisheries (b)	31	704	.....	.....	.....	.....	.....	.....	.....	.....
Total	37	2,135	2	2,156	10	11,105	.....	.....	.....	.....
Bamfield, B.C.—										
For Sea (a)	12	123	41	266	.....	.....	.....	.....	.....	.....
United States (a)	13	4,105	9	252	.....	.....	.....	.....	.....	.....
Total	25	4,228	50	518	.....	.....	.....	.....	.....	.....
Barrington Passage, N.S.—										
United States (a)	1	32	2	53	.....	.....	.....	.....	.....	.....
Sea Fisheries (a)	5	74	3	152	.....	.....	.....	.....	.....	.....
Total	6	106	5	205	.....	.....	.....	.....	.....	.....
Bathurst, N.B.—										
British West Indies (b)	2	639	.....	.....	.....	.....	.....	.....	.....	.....
Norway (a)	.....	.....	.....	.....	3	3,961	.....	.....	.....	.....
United States (a)	.....	.....	.....	.....	1	2,223	.....	.....	.....	.....
United States (b)	1	295	.....	.....	.....	.....	.....	.....	.....	.....
Sea Fisheries (b)	58	894	.....	.....	.....	.....	.....	.....	.....	.....
Total	61	1,828	.....	.....	4	6,184	.....	.....	.....	.....

(a) Steam—Vapeurs. (b) Sail—Voiliers.

COMMERCE AVEC CHAQUE PAYS ET NATIONALITÉ DES NAVIRES

N° 14.—ÉTAT du nombre et du tonnage des long-courriers à voiles et à vapeur déclarés *à la sortie* à chacun des ports ou ports secondaires du Canada mentionnés ci-après, à destination étrangère, et de la nationalité des long-courriers employés dans le commerce avec chaque pays.

Denmark — Danemark		France — France		Germany — Allemagne		Netherlands — Pays-Bas		Japan — Japon		Other Nationalities — Autres nationalités			Total	
Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Flag — Pavillon	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
													2	699
													52	5,800
													24	436
													76	6,236
													1	223
													2	216
													3	439
													10	1,001
													1	671
													62	85,255
													1	300
													39	757
													40	1,057
													2	60
3	3,888					18	28,306						32	44,957
													5	1,869
													31	704
3	3,888					18	28,306						70	47,590
													53	389
													22	4,357
													75	4,746
													3	85
													8	226
													11	311
													2	639
				1	1,300								4	5,261
													1	2,223
													1	295
													58	894
				1	1,300								66	9,312

No. 14.—STATEMENT of the Number and Tonnage of Steam and Sailing Vessels entered Outwards, *for Sea*, etc.—*Continued*

Ports and Outports and Countries for which Departed — Ports et ports secondaires et pays de destination	Great Britain — Grande-Bretagne		United States — États-Unis		Norway — Norvège		Sweden — Suède		Belgium — Belgique	
	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
Bear River, N.S.—										
United States (a)	11	20,588								
United States (b)	1	80								
Total	12	20,668								
Belliveau's Cove, N.S.—										
British West Indies (b)	3	802								
United States (b)	15	1,875	1	26						
Sea Fisheries (b)	2	18								
Total	20	2,695	1	26						
Blubber Bay, B.C.—										
United States (a)	108	33,409	1	9						
Bonne Esperance, Que.—										
Newfoundland (a)	16	6,471								
Newfoundland (b)	1	84								
Total	17	6,555								
Bridgewater, N.S.—										
British West Indies (b)	4	1,413								
Newfoundland (b)	4	672								
United States (a)					26	32,130	1	911		
United States (b)	14	5,191	1	509						
Total	22	7,276	1	509	26	32,130	1	911		
Britannia Beach, B.C.—										
United States (a)	82	70,181	32	62,657						
Buctouche, N.B.—										
United States (a)					3	2,659				
Butedale, B.C.—										
United States (a)	1	25	32	399						
Sea Fisheries (a)	39	615	52	2,023						
Total	40	640	84	2,422						
Campbellton, N.B.—										
Great Britain (a)	3	5,461			2	1,794				
British West Indies (b)	1	296								
Newfoundland (a)					1	2,610				
United States (a)					2	3,039				
United States (b)	2	692	1	567						
Total	6	6,449	1	567	5	7,443				
Campobello, N.B.—										
United States (a)	349	28,867	406	11,150						
Canso, N.S.—										
St. Pierre (a)	1	53								
United States (a)	2	1,767	1	9						
United States (b)	7	2,807								
Sea Fisheries (a)	59	9,905	29	601						
Sea Fisheries (b)	30	2,779	1	66						
Total	99	17,311	31	676						
Caraquet, N.B.—										
Sea Fisheries (b)	105	1,886								

N° 14.—État du nombre et du tonnage des long-courriers à voiles et à vapeur, déclarés *à la sortie*, etc.—*Suite*

Denmark — Danemark		France — France		Germany — Allemagne		Netherlands — Pays-Bas		Japan — Japon		Other Nationalities — Autres nationalités			Total	
Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Flag — Pavillon	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
													11	20,588
													1	80
													12	20,668
													3	802
													16	1,901
													2	18
													21	2,721
													109	33,418
													16	6,471
													1	84
													17	6,555
													4	1,413
													4	672
													27	33,041
													15	5,700
													50	40,826
													114	132,838
													3	2,659
													33	424
													91	2,638
													124	3,062
													5	7,255
													1	296
													1	2,610
2	2,344					1	1,142						5	6,525
													3	1,259
2	2,344					1	1,142						15	17,945
													755	40,017
													1	53
													3	1,776
													7	2,807
													88	10,506
													31	2,845
													130	17,987
													105	1,886

No. 14.—STATEMENT of the Number and Tonnage of Steam and Sailing Vessels entered Outwards, *for Sea*, etc.—*Continued*

Ports and Outports and Countries for which Departed — Ports et ports secondaires et pays de destination	Great Britain — Grande-Bretagne		United States — États-Unis		Norway — Norvège		Sweden — Suède		Belgium — Belgique	
	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
Charlottetown, P.E.I.—										
British West Indies (a)	1	654								
Newfoundland (a)	33	38,314			4	3,779				
Newfoundland (b)	2	160								
Cuba (a)					3	2,491				
St. Pierre (a)	2	924								
St. Pierre (b)	4	335								
United States (a)	1	3,030					1	900		
Total	43	43,417			7	6,270	1	900		
Chatham, N.B.—										
Great Britain (a)	2	3,481								
United States (a)	1	1,882			8	13,060				
United States (b)	1	939								
Total	4	6,302			8	13,060				
Chemainus, B.C.—										
Great Britain (a)	5	18,887								
British West Indies (a)	1	2,823			1	2,036				
Germany (a)	2	6,398			1	2,615				
Japan (a)										
Spain (a)	1	2,280								
United States (a)	100	40,728	72	41,990	4	11,870				
United States (b)	36	33,878	29	45,153						
Venezuela (a)	1	1,249								
British Oceania (a)			1	1,053						
Total	146	106,243	102	88,196	6	16,521				
Chester, N.S.—										
Sea Fisheries (a)	31	438								
Cheticamp, N.S.—										
United States (a)					27	24,531				
Clarks Harbour, N.S.—										
United States (a)			20	314						
Sea Fisheries (a)	12	168								
Total	12	168	20	314						
Clementsport, N.S.—										
United States (b)	4	396								
Digby, N.S.—										
United States (a)	16	722	23	328						
United States (b)	1	214								
Sea Fisheries (a)	1	57	3	105						
Total	18	993	26	433						
Englewood, B.C.—										
Japan (a)			1	5,482						
United States (a)	4	13,803	15	56,442						
Total	4	13,803	16	61,924						
Freeport, N.S.—										
United States (a)	6	276	10	160						

(a) Steam—Vapeurs. (b) Sail—Voiliers.

N° 14.—ÉTAT du nombre et du tonnage des long-courriers à voiles et à vapeur, déclarés à *la sortie*, etc.—Suite

Denmark — Danemark		France — France		Germany — Allemagne		Netherlands — Pays-Bas		Japan — Japon		Other Nationalities — Autres nationalités			Total	
Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Flag — Pavillon	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
													1	654
													37	42,093
													2	160
						1	1,226						4	3,717
													2	924
													4	335
						1	1,222						3	5,152
						2	2,448						53	53,035
													2	3,481
2	2,082												11	17,024
													1	939
2	2,082												14	21,444
													5	18,887
2	5,581												4	10,440
													3	9,013
								16	55,494				16	55,494
1	2,694												2	4,974
* 2	3,494							1	3,405	Italy	2	6,450	181	107,937
													65	79,031
													1	1,249
													1	1,053
5	11,769							17	58,899		2	6,450	278	288,078
													31	438
													27	24,531
													20	314
													12	168
													32	482
													4	396
													39	1,050
													1	214
													4	162
													44	1,426
													1	5,482
													19	70,245
													20	75,727
													16	436

No. 14.—STATEMENT of the Number and Tonnage of Steam and Saling Vessels entered Outwards, *for Sea*, etc.—*Continued*

Ports and Outports and Countries for which Departed — Ports et ports secondaires et pays de destination	Great Britain — Grande-Bretagne		United States — États-Unis		Norway — Norvège		Sweden — Suède		Belgium — Belgique	
	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
Gaspé, Que.—										
Great Britain (a)	.....	.....	.....	.....	2	2,305	.....	.....	.....	.....
British West Indies (a)	1	654	.....	.....	.....	.....	.....	.....	.....	.....
Newfoundland (a)	14	26,897	.....	.....	.....	.....	.....	.....	.....	.....
Newfoundland (b)	2	646	.....	.....	.....	.....	.....	.....	.....	.....
St. Pierre (a)	1	147	.....	.....	.....	.....	.....	.....	.....	.....
United States (a)	5	2,923	3	5,467	2	2,558	.....	.....	.....	.....
Total	23	31,267	3	5,467	4	4,863	.....	.....	.....	.....
Georgetown, P.E.I.—										
Newfoundland (a)	16	735	.....	.....	.....	.....	.....	.....	.....	.....
Cuba (a)	.....	.....	.....	.....	4	3,263	.....	.....	.....	.....
St. Pierre (a)	1	35	.....	.....	.....	.....	.....	.....	.....	.....
United States (a)	3	5,560	.....	.....	6	6,821	.....	.....	.....	.....
Sea Fisheries (b)	1	10	.....	.....	.....	.....	.....	.....	.....	.....
Total	21	6,340	.....	.....	10	10,084	.....	.....	.....	.....
Glace Bay, N.S.—										
Newfoundland (b)	1	99	.....	.....	.....	.....	.....	.....	.....	.....
For Sea (a)	2	22	.....	.....	.....	.....	.....	.....	.....	.....
For Sea (b)	19	777	.....	.....	.....	.....	.....	.....	.....	.....
United States (b)	.....	.....	12	263	.....	.....	.....	.....	.....	.....
Sea Fisheries (b)	8	87	.....	.....	.....	.....	.....	.....	.....	.....
Total	30	985	12	263	.....	.....	.....	.....	.....	.....
Guysboro, N.S.—										
United States (a)	.....	.....	.....	.....	8	5,913	2	1,770	.....	.....
Halifax, N.S.—										
Great Britain (a)	151	761,699	1	2,894	5	3,975	.....	.....	.....	.....
British West Indies (a)	2	1,541	.....	.....	11	10,714	16	16,515	.....	.....
British West Indies (b)	3	909	.....	.....	.....	.....	.....	.....	.....	.....
Newfoundland (a)	123	148,198	2	100	3	1,600	.....	.....	.....	.....
Newfoundland (b)	48	4,046	.....	.....	.....	.....	.....	.....	.....	.....
Belgium (a)	2	5,266	.....	.....	.....	.....	.....	.....	.....	.....
Azores and Madeira (a)	5	1,183	.....	.....	.....	.....	.....	.....	.....	.....
Cuba (a)	3	5,483	.....	.....	4	4,232	.....	.....	.....	.....
France (a)	.....	.....	.....	.....	1	3,178	.....	.....	.....	.....
Germany (a)	7	25,552	4	15,624	2	8,455	.....	.....	.....	.....
Netherlands (a)	2	7,027	.....	.....	2	6,188	.....	.....	.....	.....
Italy (a)	1	2,828	.....	.....	.....	.....	.....	.....	.....	.....
Norway (a)	.....	.....	.....	.....	3	14,519	.....	.....	.....	.....
Porto Rico (a)	1	1,812	.....	.....	.....	.....	.....	.....	.....	.....
Porto Rico (b)	1	216	.....	.....	.....	.....	.....	.....	.....	.....
Mexico (a)	1	5,244	.....	.....	.....	.....	.....	.....	.....	.....
For Sea (a)	23	21,921	.....	.....	.....	.....	.....	.....	.....	.....
St. Pierre (a)	52	24,314	.....	.....	3	1,287	.....	.....	.....	.....
St. Pierre (b)	4	420	.....	.....	.....	.....	.....	.....	.....	.....
Spain (a)	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Sweden (a)	.....	.....	.....	.....	.....	.....	10	70,585	.....	.....
United States (a)	226	1,226,239	40	98,001	45	190,864	25	238,295	.....	.....
United States (b)	26	10,211	13	7,010	.....	.....	.....	.....	.....	.....
Brazil (a)	4	14,427	.....	.....	.....	.....	.....	.....	.....	.....
British Guiana (a)	56	133,920	.....	.....	11	15,203	5	6,312	.....	.....
British Guiana (b)	6	1,157	.....	.....	.....	.....	.....	.....	.....	.....
Australia (a)	8	30,869	.....	.....	.....	.....	.....	.....	.....	.....
New Zealand (a)	7	24,858	.....	.....	.....	.....	.....	.....	.....	.....
Colombia (a)	11	66,665	1	5,044	.....	.....	.....	.....	.....	.....
Peru (a)	5	26,600	.....	.....	.....	.....	.....	.....	.....	.....
Denmark (a)	.....	.....	.....	.....	.....	.....	1	1,624	.....	.....
British Honduras (a)	7	15,376	.....	.....	.....	.....	.....	.....	.....	.....
Bermuda (a)	3	99	.....	.....	.....	.....	.....	.....	.....	.....
Sea Fisheries (a)	438	45,014	9	341	.....	.....	.....	.....	.....	.....
Sea Fisheries (b)	21	1,508	.....	.....	.....	.....	.....	.....	.....	.....
Total	1,242	2,614,602	70	129,014	90	260,215	57	333,331	.....	.....

(a) Steam—Vapeur. (b) Sail—Voiliers.

N° 14.—ÉTAT du nombre et du tonnage des long-courriers à voiles et à vapeur, déclarés *à la sortie*, etc.—*Suite*

Denmark — Danemark		France — France		Germany — Allemagne		Netherlands — Pays-Bas		Japan — Japon		Other Nationalities — Autres nationalités			Total	
Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Flag — Pavillon	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
													2	2,305
													1	654
													14	26,897
													2	646
		1	535										2	682
1	1,188												11	12,136
1	1,188	1	535										32	43,320
													16	735
													4	3,263
													1	35
1	1,311					1	1,222						11	14,914
													1	10
1	1,311					1	1,222						33	18,957
													1	99
													2	22
													19	777
													12	263
													8	87
													42	1,248
1	1,292					2	2,444						13	11,419
1	544												158	769,112
						1	1,205						30	29,975
													3	909
		1	147										129	150,045
													43	4,046
				1	2,144	1	5,253						4	12,663
													5	1,183
1	727			5	24,068								13	34,510
													1	3,178
				2	10,278								15	59,909
						2	18,399						6	31,614
													1	2,828
2	13,541												5	28,060
													1	1,812
													1	216
													1	5,244
		14	15,624										37	37,545
		6	1,415										61	27,016
													4	420
						1	2,156						1	2,156
													10	70,585
56	290,851	13	62,718	29	193,715	19	163,735			Italy	2	5,251	455	2,469,669
													39	17,221
													4	14,427
5	8,106			1	813								78	164,354
													6	1,157
													8	30,869
													7	24,858
				1	5,107								13	76,816
													5	26,600
6	37,577												7	39,201
													7	15,376
													3	99
		60	20,789							Spain	4	2,173	511	68,317
													21	1,508
71	351,346	94	100,693	39	236,125	24	190,748				6	7,424	1,693	4,223,498

No. 14.—STATEMENT of the Number and Tonnage of Steam and Sailing Vessels entered Outwards, *for Sea*, etc.—*Continued*

Ports and Outports and Countries for which Departed — Ports et ports secondaires et pays de destination	Great Britain — Grande-Bretagne		United States — États-Unis		Norway — Norvège		Sweden — Suède		Belgium — Belgique	
	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
Havre St. Pierre, Que.—										
Newfoundland (a)	10	8,500								
Hillsboro, N.B.—										
United States (a)					14	10,822				
United States (b)			2	850						
Total			2	850	14	10,822				
Isaacs Harbor, N.S.—										
United States (a)			8	120						
Sea Fisheries (b)	3	30	21	411						
Total	3	30	29	531						
Joggin Mines, N.S.—										
United States (b)	1	340	1	160						
Kentville, N.S.—										
United States (b)	1	214								
Kildonan, B.C.—										
United States (a)	13	9,640	4	2,623			1	2,353		
Japan (a)	1	6,919								
China (a)	1	6,919								
Sea Fisheries (a)	67	1,296	485	10,333						
Total	82	24,774	489	12,956			1	2,353		
Ladner, B.C.—										
United States (a)	2	52								
Ladysmith, B.C.—										
United States (a)	80	7,166	39	40,169						
United States (b)	81	19,573	14	2,684						
Total	161	26,739	53	42,853						
La Have, N.S.—										
British West Indies (b)	3	915								
Newfoundland (b)	1	128								
St. Pierre (a)	1	33								
United States (a)	1	40								
United States (b)	6	1,915								
Porto Rico (a)	1	116								
Sea Fisheries (a)	5	252	1	18						
Sea Fisheries (b)	27	2,268								
Total	45	5,667	1	18						
Levis, Que—										
United States (a)	1	4,414								
Colombia (a)	2	8,828								
Total	3	13,242								
Liverpool, N.S.—										
British West Indies (a)	2	50								
Newfoundland (a)	28	1,796	1	89						
France (a)					1	944				
St. Pierre (a)	9	492								
United States (a)	5	508	4	146	2	2,375	3	2,850		
United States (b)			3	2,642						
Sea Fisheries (a)	51	1,159	32	2,099						
Total	95	4,005	40	4,976	3	3,319	3	2,850		

(a) Steam—Vapeurs. (b) Sail—Voiliers.

N° 14.—ÉTAT du nombre et du tonnage des long-courriers à voiles et à vapeur, déclarés *à la sortie*, etc.—*Suite*

Denmark — Danemark		France — France		Germany — Allemagne		Netherlands — Pays-Bas		Japan — Japon		Other Nationalities — Autres nationalités			Total	
Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Flag — Pavillon	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
													10	8,500
													14	10,822
													2	850
													16	11,672
													8	120
													24	441
													32	561
													2	500
													1	214
								1	3,651				19	18,267
								6	24,144				7	31,063
								2	7,999				3	14,918
													552	11,629
								9	35,794				581	75,877
													2	52
													119	47,335
													95	22,257
													214	69,592
													3	915
													1	128
													1	33
													1	40
													6	1,915
													1	116
													6	270
													27	2,268
													46	5,685
													1	4,414
													2	8,828
													3	13,242
													2	50
													29	1,885
													1	944
													9	492
2	1,664												16	7,543
													3	2,642
													83	3,258
2	1,664												143	16,814

No. 14.—STATEMENT of the Number and Tonnage of Steam and Sailing Vessels entered Outwards, *for Sea*, etc.—*Continued*

Ports and Outports and Countries for which Departed — Ports et ports secondaires et pays de destination	Great Britain — Grande-Bretagne		United States — États-Unis		Norway — Norvège		Sweden — Suède		Belgium — Belgique	
	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
Lockeport, N.S.—										
United States (b)			5	116						
Sea Fisheries (b)	18	798								
Total	18	798	5	116						
Lords Cove, N.B.—										
United States (a)	582	10,383	241	2,497						
Louisburg, N.S.—										
Great Britain (a)	1	1,914			4	4,079				
Newfoundland (a)	4	4,634								
Newfoundland (b)	4	347	1	68						
Belgium (a)	1	3,155								
Japan (a)	1	4,223								
St. Pierre (a)	1	497								
St. Pierre (b)	3	148								
United States (a)	5	9,340								
United States (b)	1	99	3	309						
Australia (a)	2	6,575								
Honduras (a)					1	626				
Sea Fisheries (a)	3	606								
Sea Fisheries (b)	8	104	88	1,876						
Total	34	31,642	92	2,253	5	4,705				
Lower East Pubnico, N.S.—										
Sea Fisheries (a)	2	82	36	2,153						
Lunenburg, N.S.—										
British West Indies (a)	1	78								
British West Indies (b)	9	2,297								
Newfoundland (a)	7	558								
Newfoundland (b)	16	1,730								
St. Pierre (a)	14	975								
United States (a)	2	526								
United States (b)	4	1,323								
Porto Rico (a)	1	176								
Porto Rico (b)	10	1,277								
Sea Fisheries (a)	98	5,300	3	107						
Sea Fisheries (b)	164	16,550								
Total	326	30,790	3	107						
Mabou, N.S.—										
United States (a)					1	993				
Mahone Bay, N.S.—										
Sea Fisheries (b)	2	195								
Maitland, N.S.—										
United States (b)	1	425								
Meteghan River, N.S.—										
British West Indies (b)	1	383								
St. Pierre (b)	3	135								
Total	4	518								
Middleton, N.S.—										
United States (b)	1	480								

(a) Steam—Vapeur. (b) Sail—Voiliers.

N° 14.—ÉTAT du nombre et du tonnage des long-courriers à voiles et à vapeur, déclarés, *à la sortie*, etc.—*Suite*

Denmark — Danemark		France — France		Germany — Allemagne		Netherlands — Pays-Bas		Japan — Japon		Other Nationalities — Autres nationalités			Total	
Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Flag — Pavillon	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
													5	116
													18	798
													23	914
													823	12,880
													5	5,993
													4	4,634
													5	415
													1	3,155
								1	4,254				2	8,477
													1	497
													3	148
													5	9,340
													4	408
													2	6,575
													1	626
		5	1,614										8	2,220
													96	1,980
		5	1,614					1	4,254				137	44,468
													38	2,235
													1	78
													9	2,297
													7	558
													16	1,730
													14	975
													2	526
													4	1,323
													1	176
													10	1,277
													101	5,407
													164	16,550
													329	30,897
													1	993
													2	195
													1	425
													1	383
													3	135
													4	518
													1	480

No. 14.—STATEMENT of the Number and Tonnage of Steam and Sailing Vessels entered Outwards, *for Sea*, etc.—*Continued.*

Ports and Outports and Countries for which Departed — Ports et ports secondaires et pays de destination	Great Britain — Grande-Bretagne		United States — États-Unis		Norway — Norvège		Sweden — Suède		Belgium — Belgique	
	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
Moncton, N.B.—										
Great Britain (a)	.....	.....	.....	.....	2	1,953	.....	.....	.....	.....
United States (b)	4	884	1	352	.....	.....	.....	.....	.....	.....
Total	4	884	1	352	2	1,953	.....	.....	.....	.....
Montague, P.E.I.—										
Newfoundland (b)	25	1,330	.....	.....	.....	.....	.....	.....	.....	.....
St. Pierre (b)	5	364	.....	.....	.....	.....	.....	.....	.....	.....
Total	30	1,694	.....	.....	.....	.....	.....	.....	.....	.....
Montreal, Que.—										
Great Britain (a)	372	2,125,212	.....	.....	3	3,490	1	1,104	.....	.....
Greece (a)	10	23,320	.....	.....	8	14,110	4	5,244	.....	.....
British West Indies (a)	28	56,452	.....	.....	.....	.....	.....	.....	.....	.....
Gibraltar (a)	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Newfoundland (a)	67	85,005	.....	.....	6	8,454	1	1,963	.....	.....
Belgium (a)	42	140,593	.....	.....	.....	.....	.....	.....	1	3,106
Malta (a)	1	2,160	.....	.....	.....	.....	.....	.....	.....	.....
French Africa (a)	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Cuba (a)	.....	.....	1	2,613	2	8,794	.....	.....	.....	.....
Finland (a)	.....	.....	.....	.....	1	1,927	.....	.....	.....	.....
France (a)	22	141,367	.....	.....	10	28,553	.....	.....	.....	.....
Germany (a)	50	148,039	.....	.....	16	45,046	.....	.....	.....	.....
Netherlands (a)	52	159,534	.....	.....	15	45,605	1	3,299	.....	.....
Italy (a)	35	105,903	.....	.....	1	2,501	.....	.....	.....	.....
Norway (a)	.....	.....	.....	.....	25	57,274	.....	.....	.....	.....
Irish Free State (a)	13	39,196	2	2,890	3	2,017	.....	.....	.....	.....
Turkey (a)	3	6,931	.....	.....	.....	.....	.....	.....	.....	.....
Russia (a)	2	5,576	.....	.....	.....	.....	.....	.....	.....	.....
Portugal (a)	4	12,563	.....	.....	.....	.....	.....	.....	.....	.....
St. Pierre (a)	3	2,192	.....	.....	.....	.....	.....	.....	.....	.....
Spain (a)	18	45,504	.....	.....	1	704	.....	.....	.....	.....
Sweden (a)	4	7,753	.....	.....	10	8,053	5	8,725	.....	.....
Denmark (a)	.....	.....	.....	.....	3	2,129	.....	.....	.....	.....
United States (a)	17	72,303	24	107,385	5	20,842	.....	.....	.....	.....
United States (b)	.....	.....	2	2,797	.....	.....	.....	.....	.....	.....
Colombia (a)	7	41,919	.....	.....	.....	.....	.....	.....	.....	.....
Mexico (a)	1	5,244	.....	.....	1	4,397	.....	.....	.....	.....
Dutch West Indies (a)	2	11,173	1	6,364	.....	.....	.....	.....	.....	.....
Peru (a)	5	33,951	.....	.....	.....	.....	.....	.....	.....	.....
Brazil (a)	6	20,843	.....	.....	.....	.....	.....	.....	.....	.....
Venezuela (a)	1	3,437	2	8,745	.....	.....	.....	.....	.....	.....
British South Africa (a)	11	45,119	.....	.....	.....	.....	.....	.....	.....	.....
Australia (a)	11	39,114	.....	.....	.....	.....	.....	.....	.....	.....
New Zealand (a)	17	59,869	.....	.....	.....	.....	.....	.....	.....	.....
Syria (a)	3	6,110	.....	.....	.....	.....	.....	.....	.....	.....
British India (a)	1	3,032	.....	.....	.....	.....	.....	.....	.....	.....
Poland (a)	2	3,233	.....	.....	.....	.....	.....	.....	.....	.....
Argentina (a)	.....	.....	.....	.....	3	8,004	1	2,870	.....	.....
Uruguay (a)	.....	.....	.....	.....	1	2,668	.....	.....	.....	.....
Total	810	3,452,647	32	130,794	114	264,568	13	23,205	1	3,106
Murray Harbour, P.E.I.—										
Sea Fisheries (b)	1	17	.....	.....	.....	.....	.....	.....	.....	.....

(a) Steam—Vapeurs. (b) Sail—Voiliers.

N° 14.—ÉTAT du nombre et du tonnage des long-courriers à voiles et à vapeur, déclarés *à la sortie*, etc.—*Suite*

Denmark — Danemark		France — France		Germany — Allemagne		Netherlands — Pays-Bas		Japan — Japon		Other Nationalities — Autres nationalités			Total	
Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Flag — Pavillon	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
						1	1,034						3	2,987
													5	1,236
						1	1,034						8	4,223
													25	1,330
													5	364
													30	1,694
		1	1,776			1	2,370						378	2,133,952
						1	2,162			Italy	1	3,451	37	98,411
										Greece	13	50,124		
5	8,104									Greece	12	19,354	45	83,910
										Spain	1	3,389	1	3,389
													74	95,422
						9	22,818			Jugo-Slavia	1	3,783	60	192,804
										Italy	7	22,504		
													1	2,160
		1	1,986										1	1,986
													3	11,407
													1	1,927
		1	3,199							Italy	6	21,829	39	194,948
										Greece	1	2,682		
3	11,351			20	87,722	12	28,740			Jugo-Slavia	1	3,927	108	346,122
										Italy	5	18,615		
		3	8,505			30	85,705			Italy	4	13,508	106	318,260
										Greece	1	2,104		
										Jugo-Slavia	1	3,296	126	397,162
		7	16,809	1	3,275	2	5,389	4	17,078	Italy	64	215,276		
										Greece	11	27,635		
2	3,698			1	1,300								28	62,272
													18	44,103
													3	6,931
										Italy	1	3,663	3	9,239
										Spain	1	3,374	6	18,744
										Italy	1	2,807		
													3	2,192
		1	2,445	1	1,129	3	6,190			Spain	2	6,619	30	72,898
										Greece	4	10,307		
													19	24,531
13	21,257												16	23,386
						1	4,237			Poland	1	5,107	48	209,874
													2	2,797
1	2,254									Poland	2	10,202	10	54,375
										Mexico	1	3,236	3	12,877
										Mexico	1	3,237	4	20,774
													5	33,951
													6	20,843
													3	12,182
													11	45,119
													11	39,114
													17	59,869
													3	6,110
													1	3,032
				1	1,129					Italy	1	4,416	3	7,649
										Italy	1	3,184	6	15,187
													1	2,668
24	46,664	14	34,720	24	94,555	59	157,611	4	17,078		145	467,629	1,240	4,692,577
													1	17

No. 14.—STATEMENT of the Number and Tonnage of Steam and Sailing Vessels entered Outwards, *for Sea*, etc.—*Continued*

Ports and Outports and Countries for which Departed — Ports et ports secondaires et pays de destination	Great Britain — Grande-Bretagne		United States — États-Unis		Norway — Norvège		Sweden — Suède		Belgium — Belgique	
	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
Nanaimo, B.C.—										
Great Britain.....(a)	3	12,534								
Japan.....(a)	1	3,042								
United States.....(a)	93	95,365	148	79,535	2	6,148				
United States.....(b)	12	2,434	55	18,049						
British Oceania.....(a)										
Sea Fisheries.....(a)			1	14						
Total.....(a)	109	113,375	20	97,598	2	6,148				
New Campbellton, N.S.—										
Newfoundland.....(b)	1	19								
Newcastle, N.B.—										
Great Britain.....(a)	4	6,891			1	899				
British West Indies.....(b)	1	558								
Cuba.....(b)			1	635						
United States.....(a)					1	932				
United States.....(b)	3	1,828								
Total.....(a)	8	9,277	1	635	2	1,831				
New Westminster, B.C.—										
Great Britain.....(a)	38	131,994	11	42,221	3	11,700				
France.....(a)	1	3,549								
Germany.....(a)										
Japan.....(a)	1	2,280								
United States.....(a)	53	94,152	35	80,778	4	11,385				
United States.....(b)	10	2,166	1	360						
Argentina.....(a)					1	2,483				
Total.....(a)	103	234,141	47	123,359	8	25,568				
North East Harbour, N.S.—										
United States.....(a)										
Sea Fisheries.....(a)	1	12								
Total	1	12								
North Head, N.B.—										
British West Indies.....(b)	1	397								
United States.....(a)	256	28,986	53	494						
Total.....(a)	257	29,383	53	494						
North Sydney, N.S.—										
Great Britain.....(a)	1	12,177								
British West Indies.....(a)										
Newfoundland.....(a)	191	222,585			24	19,896				
Newfoundland.....(b)	257	17,791	5	419						
Belgium.....(a)	1	2,711								
France.....(a)										
Germany.....(a)					1	2,682				
Netherlands.....(a)	2	6,109								
Italy.....(a)	1	3,179								
St. Pierre.....(a)	43	28,391			1	429				
St. Pierre.....(b)	21	1,416								
Spain.....(a)										
United States.....(a)	17	13,675								
United States.....(b)	2	67	2	179						
Gibraltar.....(a)	2	5,510								
Irish Free State.....(a)	1	168								
Turkey.....(a)	1	2,267								
Sea Fisheries.....(a)	8	1,181								
Sea Fisheries.....(b)	82	4,754	18	488						
Total.....(a)	630	321,981	25	1,086	26	23,007				

(a) Steam—Vapeur. (b) Sail—Voiliers.

N° 14.—ÉTAT du nombre et du tonnage des long-courriers à voiles et à vapeur, déclarés *à la sortie*, etc.—*Suite*

Denmark — Danemark		France — France		Germany — Allemagne		Netherlands — Pays-Bas		Japan — Japon		Other Nationalities — Autres nationalités			Total	
Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Flag — Pavillon	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
								1	5,054				4	17,588
1	3,583							13	48,976				15	55,601
2	5,819					1	4,366	1	3,752				247	194,985
													57	20,483
1	2,394												1	2,394
													1	14
4	11,796					1	4,366	15	57,782				335	291,065
													1	19
													5	7,790
													1	558
													1	635
													1	932
													3	1,828
													11	11,743
2	6,938							1	5,173	Italy	1	3,175	56	201,201
													1	3,549
1	3,583												1	3,583
								46	165,919				47	168,199
7	21,430							1	3,508	Italy Panama Mexico	1 1 1	5,128 912 2,174	103	219,467
													11	2,526
													1	2,483
10	31,951							48	174,600		4	11,389	220	601,008
										Italy	1	1,283	1	1,283
													1	12
											1	1,283	2	1,295
													1	397
													309	29,480
													310	29,877
													1	12,177
		1	534										1	534
													215	242,481
										Spain	4	453	266	18,663
													1	2,711
		5	1,025										5	1,025
													1	2,682
													2	6,109
													1	3,179
		12	4,061							Spain	1	498	57	33,379
		2	306										23	1,722
										Spain	2	1,168	2	1,168
										Spain	1	2,572	18	16,247
													4	246
													2	5,510
													1	168
													1	2,267
		173	46,198							Spain	22	12,469	203	59,848
													100	5,242
		193	52,124								30	17,160	904	415,358

No. 14.—STATEMENT of the Number and Tonnage of Steam and Sailing Vessels entered Outwards, *for Sea*, etc.—*Continued*

Ports and Outports and Countries for which Departed — Ports et ports secondaires et pays de destination	Great Britain — Grande-Bretagne		United States — États-Unis		Norway — Norvège		Sweden — Suède		Belgium — Belgique	
	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
Ocean Falls, B.C.—										
Great Britain (a)	9	12,654								
United States (a)	24	36,094	38	65,019						
Australia (a)	16	61,572								
Total	49	110,320	38	65,019						
Parrsboro, N.S.—										
Great Britain (a)	1	1,698			6	5,421				
United States (a)	2	132			38	17,842				
United States (b)	65	18,911	10	3,447						
Total	68	20,741	10	3,447	44	23,263				
Pictou, N.S.—										
Great Britain (a)	1	1,617			3	2,329	2	2,619		
Great Britain (b)										
Newfoundland (a)	4	3,103								
Newfoundland (b)	1	76								
St. Pierre (b)	1	95								
Total	7	4,891			3	2,329	2	2,619		
Pointe au Pic, Que.—										
United States (a)					2	1,368				
Port Alberni, B.C.—										
Great Britain (a)										
Japan (a)					5	15,356				
United States (a)	13	31,706	18	43,301	2	6,528				
United States (b)	1	259								
British Oceania (a)	1	3,149								
Sea Fisheries (a)			1	28						
Total	15	35,114	19	43,329	7	21,884				
Port Alfred, Que.—										
Great Britain (a)	3	7,292			1	1,114	2	2,186		
Newfoundland (a)	1	3,510								
United States (a)	1	926			6	8,715				
Total	5	11,728			7	9,829	2	2,186		
Port Clyde, N.S.—										
United States (a)										
Port Hawkesbury, N.S.—										
British West Indies (b)	1	558								
Newfoundland (b)	3	193								
Cuba (b)			1	635						
United States (a)					5	3,712	1	900		
United States (b)			1	758						
Sea Fisheries (a)	18	2,686								
Sea Fisheries (b)	6	615								
Total	28	4,052	2	1,393	5	3,712	1	900		
Port La Tour, N.S.—										
Sea Fisheries (a)	2	28								
Port Mulgrave, N.S.—										
Newfoundland (b)	1	497								
United States (b)	1	1,976								
Total	2	2,473								

(a) Steam—Vapeurs. (b) Sail—Voiliers.

N° 14.—État du nombre et du tonnage des long-courriers à voiles et à vapeur, déclarés *à la sortie*, etc.—*Suite*

Denmark — Danemark		France — France		Germany — Allemagne		Netherlands — Pays-Bas		Japan — Japon		Other Nationalities — Autres nationalités			Total	
Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Flag — Pavillon	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
													9	12,654
													62	101,113
													16	61,572
													87	175,339
				1	1,270					Lettonia	1	1,263	9	9,652
													40	17,974
													75	22,358
				1	1,270						1	1,263	124	49,984
2	2,814					1	1,533						9	10,912
1	247												1	247
													4	3,103
													1	76
													1	95
3	3,061					1	1,533						16	14,433
													2	1,368
										Italy	1	3,175	1	3,175
3	8,135							12	46,495				20	69,986
4	13,969												37	95,504
													1	259
													1	3,149
													1	28
7	22,104							12	46,495		1	3,175	61	172,101
													6	10,592
													1	3,510
													7	9,641
													14	23,743
1	1,641												1	1,641
													1	558
													3	193
													1	635
		1	2,546			1	1,222						8	8,380
													1	758
													18	2,686
													6	615
		1	2,546			1	1,222						38	13,825
													2	28
													1	497
													1	1,976
													2	2,473

No. 14.—STATEMENT of the Number and Tonnage of Steam and Sailing Vessels entered Outwards, *for Sea*, etc.—*Continued*

Ports and Outports and Countries for which Departed — Ports et ports secondaires et pays de destination	Great Britain — Grande-Bretagne		United States — États-Unis		Norway — Norvège		Sweden — Suède		Belgium — Belgique	
	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
Port Wade, N.S.—										
United States.....(b)	6	299								
Port Williams, N.S.—										
United States.....(a)					2	1,876				
Powell River, B.C.—										
British West Indies.....(a)			1	2,000						
United States.....(a)	52	24,607	88	85,173						
United States.....(b)			3	566						
Argentina.....(a)			11	39,178	8	20,399				
Australia.....(a)	9	34,907								
New Zealand.....(a)	5	18,187								
Chile.....(a)					1	2,606				
Total.....	66	77,701	103	126,917	9	23,005				
Prince Rupert, B.C.—										
Great Britain.....(a)	10	33,598					1	3,980		
Portugal.....(a)	1	2,998								
Japan.....(a)										
United States.....(a)	271	196,715	1,280	65,246						
Sea Fisheries.....(a)	955	9,693	143	2,085						
Total.....	1,237	243,004	1,423	67,331			1	3,980		
Quatsino, B.C.—										
Japan.....(a)										
For Sea.....(a)	1	11	12	253						
United States.....(a)	2	1,082	5	16,652						
Total.....	3	1,093	17	16,905						
Quebec, Que.—										
Great Britain.....(a)	76	524,131			4	8,529				
British West Indies.....(a)							1	1,311		
Newfoundland.....(a)	51	53,369								
Newfoundland.....(b)	2	298								
Belgium.....(a)	28	101,721							1	3,106
France.....(a)	4	9,558			12	34,186				
Germany.....(a)	16	129,215			6	17,852				
Netherlands.....(a)	4	11,432			13	40,910				
Italy.....(a)	3	10,334								
Sweden.....(a)					1	701				
United States.....(a)	5	30,305	6	18,465	2	2,111				
United States.....(b)			3	266						
Colombia.....(a)	2	11,125								
Peru.....(a)	2	13,422								
Russia.....(a)										
Total.....	193	894,910	9	18,731	38	104,289	1	1,311	1	3,106
Richibucto, N.B.—										
United States.....(a)			4	4,034						
United States.....(b)	3	2,361	1	627						
Total.....	3	2,361	5	4,661						
Rimouski, Que.—										
Great Britain.....(a)	5	8,815			2	1,798				
United States.....(a)	55	59,998	2	2,458	4	3,570				
Total.....	60	68,813	2	2,458	6	5,368				

(a) Steam—Vapeur. (b) Sail—Voiliers.

N° 14.—ÉTAT du nombre et du tonnage des long-courriers à voiles et à vapeur, déclarés *à la sortie*, etc.—*Suite*

Denmark — Danemark		France — France		Germany — Allemagne		Netherlands — Pays-Bas		Japan — Japon		Other Nationalities — Autres Nationalités			Total	
Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Flag — Pavillon	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
													6	299
													2	1,876
													1	2,000
													140	109,780
													3	566
													19	59,577
1	2,737												10	37,644
													5	18,187
													1	2,606
1	2,737												179	230,360
								1	5,054				12	42,632
													1	2,998
								1	5,199				1	5,199
													1,551	261,961
													1,098	11,778
								2	10,253				2,663	324,568
								6	24,842				6	24,842
													13	264
								1	4,038				8	21,772
								7	28,880				27	46,878
1	1,355												81	534,015
													1	1,311
													51	53,369
													2	298
						2	9,135						31	113,962
													16	43,744
2	6,850			9	36,459	1	2,287						34	192,663
						4	11,461			Italy	1	5,976	22	69,779
						1	2,670			Italy	6	20,757	10	33,761
													1	701
2	5,750												15	56,631
													3	266
													2	11,125
													2	13,422
										Russia	2	8,322	2	8,322
5	13,955			9	36,459	8	25,553				9	35,055	273	1,133,369
													4	4,034
													4	2,988
													8	7,022
													7	10,613
													61	66,026
													68	76,639

No. 14.—STATEMENT of the Number and Tonnage of Steam and Sailing Vessels entered Outwards, *for Sea*, etc.—*Continued*

Ports and Outports and Countries for which Departed — Ports et ports secondaires et pays de destination	Great Britain — Grande-Bretagne		United States — États-Unis		Norway — Norvège		Sweden — Suède		Belgium — Belgique	
	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
Riverport, N.S.—										
Newfoundland (b)	1	30								
St. Pierre (a)	6	344								
St. Pierre (b)	1	99								
Sea Fisheries (a)	1	69								
Sea Fisheries (b)	28	2,836								
Total	37	3,378								
Sandy Cove, N.S.—										
United States (a)	2	69								
Sandy Point, N.S.—										
British West Indies (a)	1	90								
Newfoundland (b)			1	152						
United States (a)	2	65	10	472						
United States (b)	4	1,505	3	1,513						
Sea Fisheries (a)	1	32	82	5,662						
Sea Fisheries (b)	1	79								
Total	9	1,771	96	7,799						
Sheet Harbour, N.S.—										
United States (a)			1	948	11	10,854				
Sea Fisheries (a)	2	25								
Total	2	25	1	948	11	10,854				
Shelburne, N.S.—										
British West Indies (a)	1	25								
British West Indies (b)	4	1,171								
Newfoundland (b)	4	355	1	92						
St. Pierre (a)	1	52								
United States (a)	2	122	12	412						
United States (b)	1	299	2	139						
Sea Fisheries (a)	5	233	82	5,601						
Total	18	2,257	97	6,244						
Sherbrooke, N.S.—										
Great Britain (a)					1	677				
United States (a)	2	2,015			7	5,641	6	5,250		
United States (b)	2	418	2	1,034						
Total	4	2,433	2	1,034	8	6,318	6	5,250		
Shippegan, N.B.—										
United States (a)										
Sea Fisheries (b)	28	375								
Total	28	375								
Sidney, B.C.—										
United States (a)	46	4,342	500	159,196	2	5,690				
United States (b)	3	736	4	44						
Total	49	5,078	504	159,240	2	5,690				
Sorel, Que.—										
Newfoundland (a)	13	9,164			5	5,841				
Netherlands (a)					1	1,637				
Total	13	9,164			6	7,478				

(a) Steam—Vapeurs. (b) Sail—Voiliers.

N° 14—ÉTAT du nombre et du tonnage des long-courriers à voiles et à vapeur, déclarés *à la sortie*, etc.—*Suite*

Denmark — Danemark		France — France		Germany — Allemagne		Netherlands — Pays-Bas		Japan — Japon		Other Nationalities — Autres Nationalités			Total	
Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Flag — Pavillon	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
													1	30
													6	344
													1	99
													1	69
													28	2,836
													37	3,378
													2	69
													1	90
													1	152
													12	537
													7	3,018
													83	5,694
													1	79
													105	9,570
													12	11,802
													2	25
													14	11,827
													1	25
													4	1,171
													5	447
													1	52
													14	534
													3	438
													87	5,834
													115	8,501
													1	677
						2	2,444						17	15,350
													4	1,452
						2	2,444						22	17,479
1	1,206												1	1,206
													28	375
1	1,206												29	1,581
													548	169,228
													7	780
													555	170,008
													18	15,005
													1	1,637
													19	16,642

No. 14.—STATEMENT of the Number and Tonnage of Steam and Sailing Vessels entered Outwards, *for Sea*, etc.—*Continued*

Ports and Outports and Countries for which Departed — Ports et ports secondaires et pays de destination	Great Britain — Grande-Bretagne		United States — États-Unis		Norway — Norvège		Sweden — Suède		Belgium — Belgique	
	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
Souris, P.E.I.—										
Newfoundland (a)	2	1,788								
St. Pierre (b)	4	316								
Total	6	2,104								
Steveston, B.C.—										
United States (a)	18	524	2	48						
Stewart, B.C.—										
United States (a)	23	4,283	8	6,281						
St. Andrews, N.B.—										
United States (a)	832	30,980	594	9,446						
United States (b)			1	166						
Total	832	30,980	595	9,612						
Saint George, N.B.—										
United States (a)	31	5,504	39	678						
St. John, N.B.—										
Great Britain (a)	77	433,400			3	2,006	3	4,043		
British West Indies (b)	4	2,373								
Newfoundland (a)	1	107								
Newfoundland (b)	1	435								
Belgium (a)	1	6,473								
Greece (a)	2	5,268								
Cuba (a)	15	28,336	1	1,280	16	16,153	1	905		
France (a)	8	64,378			5	14,222				
Germany (a)	2	6,514			2	6,232				
Netherlands (a)	2	5,899			5	16,419				
Italy (a)	5	16,734								
Norway (a)					9	22,624				
Turkey (a)	3	7,350								
Denmark (a)										
Spain (a)	4	7,897								
United States (a)	168	112,758	512	134,099	8	8,679				
United States (b)	35	16,738	86	26,620						
British West Africa (a)	4	15,335								
British South Africa (a)	2	8,585								
Colombia (a)	1	6,708								
Sea Fisheries (a)	13	103								
Total	348	745,391	599	161,999	48	86,335	4	4,948		
St. Peters, N.S.—										
United States (a)					18	13,935				
St. Stephen, N.B.—										
United States (a)	3	52	2	82						
United States (b)			1	758						
Total	3	52	3	840						
Summerside, P.E.I.—										
Newfoundland (a)	1	188								
Cuba (a)	1	1,305			2	2,047				
United States (a)	1	3,030								
United States (b)	2	892								
Total	5	5,415			2	2,047				

(a) Steam—Vapeur. (b) Sail—Voiliers.

N° 14.—ÉTAT du nombre et du tonnage des long-courriers à voiles et à vapeur, déclarés *à la sortie*, etc.—*Suite*

Denmark — Danemark		France — France		Germany — Allemagne		Netherlands — Pays-Bas		Japan — Japon		Other Nationalities — Autres Nationalités			Total	
Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Flag — Pavillon	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
													2	1,788
													4	316
													6	2,104
													20	572
													31	10,564
													1,426	40,426
													1	166
													1,427	40,592
													70	6,182
				1	1,672								84	441,121
													4	2,373
													1	107
													1	435
													1	6,473
										Greece	1	3,120	3	8,388
6	7,452			1	811								40	54,937
										Italy	4	14,792	17	93,392
				2	5,419								6	18,165
													7	22,318
						1	2,987	1	4,254	Italy	24	83,430	31	107,405
													9	22,624
				1	1,927								4	9,277
6	7,708												6	7,708
													4	7,897
2	2,533			7	18,074	2	2,258			Italy	1	1,283	700	279,684
													121	43,358
													4	15,335
													2	8,585
													1	6,708
													13	103
14	17,693			12	27,903	3	5,245	1	4,254		30	102,625	1,059	1,156,393
													18	13,935
													5	134
													1	758
													6	892
													1	188
1	2,362												5	5,714
1	1,092												2	4,122
													2	892
3	3,454												10	10,916

No. 14.—STATEMENT of the Number and Tonnage of Steam and Sailing Vessels entered Outwards, *for Sea*, etc.—*Continued*

Ports and Outports and Countries for which Departed — Ports et ports secondaires et pays de destination	Great Britain — Grande-Bretagne		United States — États-Unis		Norway — Norvège		Sweden — Suède		Belgium — Belgique	
	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
Sydney, N.S.—										
Great Britain (a)	12	20,567	1	470	9	7,401	1	1,310	.....	.....
British West Indies (a)	1	3,472	.....	.....	.....	.....	.....	.....	.....	.....
Newfoundland (a)	39	55,603	.....	.....	94	293,714	3	4,270	.....	.....
Newfoundland (b)	18	1,278	.....	.....	.....	.....	.....	.....	.....	.....
Belgium (a)	7	21,837	.....	.....	.....	.....	.....	.....	.....	.....
Greece (a)	4	9,402	.....	.....	.....	.....	.....	.....	.....	.....
Australia (a)	15	53,965	.....	.....	.....	.....	.....	.....	.....	.....
France (a)	4	12,138	.....	.....	6	6,989	.....	.....	.....	.....
Germany (a)	11	28,268	.....	.....	1	2,397	.....	.....	.....	.....
Netherlands (a)	10	29,381	.....	.....	2	5,718	.....	.....	.....	.....
Italy (a)	6	19,735	.....	.....	.....	.....	.....	.....	.....	.....
Norway (a)	.....	.....	.....	.....	6	9,518	.....	.....	.....	.....
Denmark (a)	1	136	.....	.....	3	2,129	.....	.....	.....	.....
Portugal (a)	2	5,440	.....	.....	.....	.....	.....	.....	.....	.....
Russia (a)	1	3,028	.....	.....	.....	.....	.....	.....	.....	.....
St. Pierre (a)	3	142	.....	.....	1	932	.....	.....	.....	.....
St. Pierre (b)	3	271	.....	.....	.....	.....	.....	.....	.....	.....
Spain (a)	5	11,275	.....	.....	.....	.....	.....	.....	.....	.....
Sweden (a)	.....	.....	.....	.....	5	3,619	.....	.....	.....	.....
United States (a)	5	11,806	1	3,185	3	7,231	.....	.....	.....	.....
United States (b)	.....	.....	1	15	.....	.....	.....	.....	.....	.....
British South Africa (a)	5	21,938	.....	.....	.....	.....	.....	.....	.....	.....
Syria (a)	1	2,036	.....	.....	.....	.....	.....	.....	.....	.....
Gibraltar (a)	5	11,884	.....	.....	.....	.....	.....	.....	.....	.....
Argentina (a)	5	17,317	.....	.....	.....	.....	.....	.....	.....	.....
Japan (a)	5	20,812	.....	.....	.....	.....	.....	.....	.....	.....
Palestine (a)	1	1,899	.....	.....	.....	.....	.....	.....	.....	.....
Sea Fisheries (a)	3	444	.....	.....	.....	.....	.....	.....	.....	.....
Sea Fisheries (b)	.....	.....	38	974	.....	.....	.....	.....	.....	.....
Total	172	364,073	41	4,644	130	339,648	4	5,580	.....	.....
Three Rivers, Que.—										
Great Britain (a)	36	107,477	1	3,185	12	29,677	.....	.....	.....	.....
United States (a)	.....	.....	.....	.....	1	660	.....	.....	.....	.....
Argentina (a)	.....	.....	.....	.....	3	8,206	.....	.....	.....	.....
Total	36	107,477	1	3,185	16	38,543	.....	.....	.....	.....
Truro, N.S.—										
United States (b)	4	1,331	1	307	.....	.....	.....	.....	.....	.....
Union Bay, B.C.—										
Great Britain (a)	7	19,182	.....	.....	.....	.....	.....	.....	.....	.....
Belgium (a)	1	3,367	.....	.....	.....	.....	.....	.....	.....	.....
China (a)	3	9,912	.....	.....	1	2,936	.....	.....	.....	.....
Germany (a)	2	5,809	.....	.....	.....	.....	.....	.....	.....	.....
Japan (a)	1	3,293	.....	.....	.....	.....	.....	.....	.....	.....
United States (a)	43	115,322	47	12,345	.....	.....	.....	.....	.....	.....
United States (b)	2	420	.....	.....	.....	.....	.....	.....	.....	.....
Portugal (a)	2	5,667	.....	.....	.....	.....	.....	.....	.....	.....
British Oceania (a)	1	2,820	.....	.....	.....	.....	.....	.....	.....	.....
Denmark (a)	1	3,207	.....	.....	.....	.....	.....	.....	.....	.....
British India (a)	1	3,154	.....	.....	.....	.....	.....	.....	.....	.....
Greece (a)	1	2,873	.....	.....	.....	.....	.....	.....	.....	.....
Total	65	175,026	47	12,345	1	2,936	.....	.....	.....	.....
Vancouver, B.C.—										
Great Britain (a)	185	677,964	16	63,760	18	72,707	7	23,544	.....	.....
British West Indies (a)	2	4,457	4	8,026	1	2,501	.....	.....	.....	.....
Belgium (a)	11	38,630	.....	.....	.....	.....	.....	.....	.....	.....
China (a)	11	53,147	24	111,713	4	11,794	1	3,681	.....	.....
France (a)	2	7,238	.....	.....	2	5,754	.....	.....	.....	.....
Germany (a)	20	72,882	.....	.....	3	7,646	.....	.....	.....	.....
Netherlands (a)	26	89,585	.....	.....	2	5,448	2	7,336	.....	.....
Italy (a)	2	5,513	.....	.....	.....	.....	.....	.....	.....	.....

(a) Steam—Vapeur. (b) Sail—Voiliers.

N° 14.—ÉTAT du nombre et du tonnage des long-courriers à voiles et à vapeur, déclarés *à la sortie*, etc.—*Suite*

Denmark — Danemark		France — France		Germany — Allemagne		Netherlands — Pays-Bas		Japan — Japon		Other Nationalities — Autres Nationalités			Total	
Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Flag — Pavillon	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
2	2,575												25	32,323
		1	538										2	4,010
													136	353,587
													18	1,278
						1	2,965						8	24,802
										Greece	12	34,230	16	43,632
													15	53,965
										Italy	2	7,076	12	26,203
1	4,501									Finland	1	1,927	15	41,062
										Italy	1	3,969		
						2	5,019						14	40,118
										Greece	4	11,107	22	69,762
										Italy	12	38,920		
													6	9,518
													4	2,265
													2	5,440
													1	3,028
		3	1,171										7	2,245
		1	144										4	415
						1	1,872			Greece	3	7,996	9	21,143
													5	3,619
1	1,709			1	1,129	1	2,987			Italy	1	3,970	13	32,017
													1	15
								1	4,259				6	26,197
													1	2,035
						1	1,872			Greece	2	5,586	8	19,342
				1	1,129								6	18,446
													5	20,812
													1	1,899
		14	3,542							Spain	4	2,167	21	6,153
													38	974
4	8,785	19	5,395	2	2,258	6	14,715	1	4,259		42	116,948	421	866,305
2	3,621			2	3,826	2	4,163						55	151,949
													1	660
										Italy	1	3,184	4	11,390
2	3,621			2	3,826	2	4,163				1	3,184	60	163,999
													5	1,638
													7	19,182
													1	3,367
													4	12,848
													2	5,809
													1	3,293
						1	4,543						91	132,210
													2	420
										Spain	1	3,374	3	9,041
													1	2,820
													1	3,207
													1	3,154
													1	2,873
						1	4,543				1	3,374	115	198,224
5	17,794			1	4,048	12	62,437	10	44,704	Spain	2	6,650	256	973,608
4	8,679												11	23,663
1	2,675	2	7,653	5	20,508	3	15,772	1	4,260				23	89,498
3	10,857							25	111,766	China	4	16,729	72	319,687
		20	73,636							Italy	3	14,043	27	100,671
1	4,247			32	127,549	2	8,952						58	221,276
		1	3,225			7	31,698	1	5,085				39	142,377
													2	5,513

No. 14.—STATEMENT of the Number and Tonnage of Steam and Sailing Vessels entered Outwards, *for Sea*, etc.—*Continued*

Ports and Outports and Countries for which Departed — Ports et ports secondaires et pays de destination	Great Britain — Grande-Bretagne		United States — États-Unis		Norway — Norvège		Sweden — Suède		Belgium — Belgique	
	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
Vancouver, B.C.—*Concluded*										
Fiji Islands (a)	1	3,642	1	1,053						
Japan (a)	17	107,058	4	18,846	10	35,683	1	3,655		
British India (a)	2	6,304								
Peru (a)	1	3,194	1	2,978	2	5,408	1	3,151		
British South Africa (a)	5	15,769								
British South Africa (b)										
Spain (a)	1	3,136								
Chile (a)					3	8,795				
Sweden (a)							11	35,636		
United States (a)	890	1,455,395	421	772,297	6	19,124				
United States (b)			12	1,781						
Italy (a)										
Argentina (a)			5	17,833	11	28,132				
New Zealand (a)	5	18,672	11	38,339						
Australia (a)	32	188,023			1	2,939	4	12,449		
Mexico (a)	10	3,412								
Hong Kong (a)	29	236,533	3	11,809						
Gibraltar (a)	1	3,773								
Portugal (a)	6	18,541								
Colombia (a)			17	32,341	1	3,101				
Denmark (a)	3	9,448			1	2,968	1	3,392		
Korea (a)										
Greece (a)	3	9,697								
Uruguay (a)					1	2,765				
Sea Fisheries (a)	182	3,014	8	177						
Total	1,447	3,035,027	527	1,080,953	66	214,765	28	92,844		
Victoria, B.C.—										
Great Britain (a)	5	12,574								
British West Indies (a)	1	3,208	1	1,996						
Australia (a)	11	85,760								
China (a)	7	71,503			1	2,814				
New Zealand (a)	5	41,060								
Panama (a)	1	2,823								
Netherlands (a)	1	4,848					1	3,655		
Japan (a)	24	190,354	26	209,808						
British South Africa (a)	2	6,307								
For Sea (a)	26	987	99	1,805						
Russia (a)							1	1,286		
Mexico (a)	2	1,493								
Dutch East Indies (a)										
United States (a)	762	832,139	1,022	1,567,033	3	11,271				
United States (b)	249	47,605	27	12,681						
Total	1,096	1,300,661	1,175	1,793,323	4	14,085	2	4,941		
Victoria, P.E.I.—										
Newfoundland (a)	1	125					1	900		
Westport, N.S.—										
United States (a)	2	79	18	222						
Weymouth, N.S.—										
Great Britain (a)	1	926			2	1,587				
British West Indies (b)	1	212								
Newfoundland (b)	1	35								
Cuba (b)	2	789								
St. Pierre (b)	3	127								
United States (a)					3	1,425				
United States (b)	21	4,245								
Total	29	6,334			5	3,012				
White Rock, B.C.—										
United States (a)	1	39	2	28						

(a) Steam—Vapeurs. (b) Sail—Voiliers.

N° 14.—ÉTAT du nombre et du tonnage des long-courriers à voiles et à vapeur, déclarés *à la sortie*, etc.—*Suite*

Denmark — Danemark		France — France		Germany — Allemagne		Netherlands — Pays-Bas		Japan — Japon		Other Nationalities — Autres Nationalités			Total	
Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Flag — Pavillon	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
													2	4,695
11	33,068							171	688,017	China	30	114,129	246	1,006,938
										Italy	2	6,482		
													2	6,304
													5	14,731
													5	15,769
								1	5,173				1	5,173
													1	3,136
													3	8,795
													11	35,636
5	15,621							16	71,762	China	1	3,709	1,339	2,337,908
													12	1,781
										Italy	11	48,853	11	48,853
													16	45,965
													16	57,011
4	10,195												41	213,606
													10	3,412
								1	3,853				33	252,195
								1	4,260				2	8,033
								1	4,225				7	22,766
													18	35,442
7	29,854												12	45,662
								1	2,908				1	2,908
								1	4,280				4	13,977
													1	2,765
													190	3,191
41	132,990	23	84,514	38	152,105	24	118,859	230	950,293		53	210,595	2,477	6,072,945
													5	12,574
1	1,998												3	7,202
1	2,394												12	88,154
													8	74,317
													5	41,060
													1	2,823
													2	8,503
1	3,583							43	209,498				94	613,243
													2	6,307
													125	2,792
													1	1,286
													2	1,493
1	3,583												1	3,583
1	3,425							51	239,899	Undocumented	1	1,284	1,840	2,655,051
													276	60,286
5	14,983							94	449,397		1	1,284	2,377	3,578,674
													2	1,025
													20	301
													3	2,513
													1	212
													1	35
													2	789
													3	127
1	1,641												4	3,066
													21	4,245
1	1,641												35	10,987
													3	67

No. 14.—STATEMENT of the Number and Tonnage of Steam and Sailing Vessels entered Outwards, *for Sea*, etc.—*Concluded*

Ports and Outports and Countries for which Departed — Ports et ports secondaires et pays de destination	Great Britain — Grande-Bretagne		United States — États-Unis		Norway — Norvège		Sweden — Suède		Belgium — Belgique	
	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
Windsor, N.S.—										
Newfoundland.....(a)	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
St. Pierre.....(a)	.....	.....	.....	.....	1	932	.....	.....	.....	.....
United States.....(a)	103	195,201	.....	.....	64	59,234	.....	.....	.....	.....
United States.....(b)	28	8,214	14	8,421	.....	.....	.....	.....	.....	.....
Total.....	131	203,415	14	8,421	65	60,166	.....	.....	.....	.....
Yarmouth, N.S.—										
British West Indies.....(b)	1	58	.....	.....	.....	.....	.....	.....	.....	.....
Newfoundland.....(b)	23	1,375	.....	.....	.....	.....	.....	.....	.....	.....
Cuba.....(a)	.....	.....	.....	.....	1	734	.....	.....	.....	.....
St. Pierre.....(b)	22	1,073	.....	.....	.....	.....	.....	.....	.....	.....
United States.....(a)	35	31,694	144	381,206	9	3,861	.....	.....	.....	.....
United States.....(b)	10	886	43	1,261	.....	.....	.....	.....	.....	.....
Sea Fisheries.....(b)	38	2,851	47	2,481	.....	.....	.....	.....	.....	.....
Total.....	129	37,937	234	384,948	10	4,595	.....	.....	.....	.....
York Factory, Man.—										
Newfoundland.....(a)	1	1,115	.....	.....	.....	.....	.....	.....	.....	.....

(a) Steam—Vapeurs. (b) Sail—Voiliers.

N° 14.—ÉTAT du nombre et du tonnage des long-courriers à voiles et à vapeur, déclarés *à la sortie*, etc.—*Fin*

Denmark — Danemark		France — France		Germany — Allemagne		Netherlands — Pays-Bas		Japan — Japon		Other Nationalities — Autres Nationalités			Total	
Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Flag — Pavillon	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
.....	.....	.....	.....	1	813	.....	.....	.....	.....	.....	.....	.....	1	813
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	932
1	1,345	.....	.....	1	1,091	.....	.....	.....	.....	.....	.....	.....	169	256,871
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	42	16,635
1	1,345	.....	.....	2	1,904	.....	.....	.....	.....	.....	.....	.....	213	275,251
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	58
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	23	1,375
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	734
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	22	1,073
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	188	416,761
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Italy.....	1	1,283	54	3,430
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	85	5,332
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1,283	374	428,763
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1,115

No. 15.—Summary Statement of the Nationality of Sea-going Vessels entered Outwards, *for Sea*, for each Country

No.	Countries for which departed — Pays de destination	Great Britain — Grande-Bretagne		United States — États-Unis		Norway — Norvège		Sweden — Suède		Belgium — Belgique	
		Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
1	Great Britain	1,008	4,942,145	30	112,530	83	163,441	17	38,786	.....	.....
2	Australia	104	500,785	.....	.....	1	2,939	4	12,449	.....	.....
3	Bermuda	3	99	.....	.....	.....	.....	.....	.....	.....	.....
4	British South Africa	25	97,718	.....	.....	.....	.....	.....	.....	.....	.....
5	British West Africa	4	15,335	.....	.....	.....	.....	.....	.....	.....	.....
6	British Guiana	62	135,077	.....	.....	11	15,203	5	6,312	.....	.....
7	British Honduras	7	15,376	.....	.....	.....	.....	.....	.....	.....	.....
8	British India	4	12,490	.....	.....	.....	.....	.....	.....	.....	.....
9	British West Indies	81	86,485	6	12,022	13	15,251	17	17,826	.....	.....
10	British Oceania	2	5,969	1	1,053	.....	.....	.....	.....	.....	.....
11	Fiji Islands	1	3,642	1	1,053	.....	.....	.....	.....	.....	.....
12	Gibraltar	8	21,167	.....	.....	.....	.....	.....	.....	.....	.....
13	Hong Kong	29	236,533	3	11,809	.....	.....	.....	.....	.....	.....
14	Irish Free State	14	39,364	2	2,890	3	2,017	.....	.....	.....	.....
15	Malta	1	2,160	.....	.....	.....	.....	.....	.....	.....	.....
16	Newfoundland	1,038	703,828	11	920	137	335,894	5	7,133	.....	.....
17	New Zealand	39	162,646	11	38,339	.....	.....	.....	.....	.....	.....
18	Palestine	1	1,899	.....	.....	.....	.....	.....	.....	.....	.....
19	Argentina	5	17,317	16	57,011	26	67,224	1	2,870	.....	.....
20	Azores and Madeira	5	1,183	.....	.....	.....	.....	.....	.....	.....	.....
21	Belgium	94	323,753	.....	.....	.....	.....	.....	.....	2	6,212
22	Brazil	10	35,270	.....	.....	.....	.....	.....	.....	.....	.....
23	Chile	.....	.....	.....	.....	4	11,401	.....	.....	.....	.....
24	China	22	141,481	24	111,713	6	17,544	1	3,681	.....	.....
25	Colombia	23	135,245	18	37,385	1	3,101	.....	.....	.....	.....
26	Cuba	21	35,913	4	5,163	32	37,714	1	905	.....	.....
27	Denmark	5	12,791	.....	.....	7	7,226	2	5,016	.....	.....
28	Dutch East Indies	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
29	Dutch West Indies	2	11,173	1	6,364	.....	.....	.....	.....	.....	.....
30	Finland	.....	.....	.....	.....	1	1,927	.....	.....	.....	.....
31	France	41	238,228	.....	.....	37	93,826	.....	.....	.....	.....
32	French Africa	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
33	Germany	110	422,677	4	15,624	32	92,925	.....	.....	.....	.....
34	Greece	20	50,560	.....	.....	8	14,110	4	5,244	.....	.....
35	Honduras	.....	.....	.....	.....	1	626	.....	.....	.....	.....
36	Italy	53	164,226	.....	.....	1	2,501	.....	.....	.....	.....
37	Japan	51	337,981	31	234,136	15	51,039	1	3,655	.....	.....
38	Korea	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
39	Mexico	14	15,393	.....	.....	1	4,397	.....	.....	.....	.....
40	Miquelon and St. Pierre	214	63,450	.....	.....	6	3,580	.....	.....	.....	.....
41	Netherlands	99	313,815	.....	.....	40	121,925	4	14,290	.....	.....
42	Norway	.....	.....	.....	.....	46	107,896	.....	.....	.....	.....
43	Panama	1	2,823	.....	.....	.....	.....	.....	.....	.....	.....
44	Peru	13	77,167	1	2,978	2	5,408	1	3,151	.....	.....
45	Poland	2	3,233	.....	.....	.....	.....	.....	.....	.....	.....
46	Porto Rico	14	3,597	.....	.....	.....	.....	.....	.....	.....	.....
47	Portugal	15	45,209	.....	.....	.....	.....	.....	.....	.....	.....
48	Russia	3	8,604	.....	.....	.....	.....	1	1,286	.....	.....
49	Spain	29	70,092	.....	.....	1	704	.....	.....	.....	.....
50	Sweden	4	7,753	.....	.....	16	12,373	16	44,361	.....	.....
51	Syria	4	8,145	.....	.....	.....	.....	.....	.....	.....	.....
52	Turkey	7	16,548	.....	.....	.....	.....	.....	.....	.....	.....
53	United States	6,206	5,266,441	6,410	4,094,967	368	554,268	40	253,229	.....	.....
54	Uruguay	.....	.....	.....	.....	2	5,433	.....	.....	.....	.....
55	Venezuela	2	4,686	2	8,745	.....	.....	.....	.....	.....	.....
56	For Sea	83	23,841	152	2,324	.....	.....	.....	.....	.....	.....
57	Sea Fisheries	2,697	122,401	1,213	38,431	.....	.....	.....	.....	.....	.....
	Total	12,300	14,963,714	7,941	4,795,457	901	1,751,893	120	420,194	2	6,212

N° 15.—ÉTAT SOMMAIRE des long-courriers déclarés *à la sortie*, pour chaque pays

Denmark — Danemark		France — France		Germany — Allemagne		Netherlands — Pays-Bas		Japan — Japon		Other Nationalities — Autres Nationalités			Total		
Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Flag — Pavillon	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	No.
										Italy	2	6,350			
16	35,888	1	1,776	5	10,816	17	71,537	13	59,985	Lettonia	1	1,263	1,195	5,451,167	1
										Spain	2	6,650			
6	15,326												115	531,499	2
													3	99	3
								2	9,432				27	107,150	4
													4	15,335	5
5	8,106			1	813								84	165,511	6
													7	15,376	7
													4	12,490	8
12	24,362	2	1,072			1	1,205			Greece	12	19,354	144	177,577	9
1	2,394												4	9,416	10
													2	4,695	11
						1	1,872	1	4,260	Spain	1	3,389	13	36,274	12
										Greece	2	5,586			
								1	3,853				33	252,195	13
													19	44,271	14
													1	2,160	15
		1	147	1	813					Spain	4	453	1,197	1,049,188	16
													50	200,985	17
													1	1,899	18
				2	2,258					Italy	2	6,368	52	153,048	19
													5	1,183	20
1	2,675	2	7,653	6	22,652	16	55,943	1	4,260	Jugo Slavia	1	3,783	130	449,435	21
										Italy	7	22,504			
													10	35,270	22
													4	11,401	23
3	10,857							27	119,765	China	4	16,729	87	421,770	24
1	2,254			1	5,107					Poland	2	10,202	46	193,294	25
9	10,541			6	24,879	1	1,226						74	116,341	26
32	96,396												46	121,429	27
1	3,583												1	3,583	28
										Mexico	1	3,237	4	20,774	29
													1	1,927	30
		26	77,860							Italy	15	57,740	119	467,654	31
		1	1,986										1	1,986	32
										Greece	1	2,682			
8	30,532			65	267,427	15	39,979			Jugo Slavia	1	3,927	243	900,284	33
										Italy	6	22,584			
										Finland	1	1,927			
						1	2,162	1	4,280	Greece	26	87,474	61	167,281	34
										Italy	1	3,451			
													1	626	35
										Jugo Slavia	1	3,296			
		7	16,809	1	3,275	4	11,046	5	21,332	Italy	117	407,236	204	668,463	36
										Greece	15	38,742			
16	48,369							315	1,272,838	China	30	114,129	461	2,068,629	37
										Italy	2	6,482			
								1	2,908				1	2,908	38
										Mexico	1	3,236	16	23,026	39
		25	7,632							Spain	1	498	246	75,160	40
		4	11,730			45	152,282	1	5,085	Italy	5	19,484	199	640,715	41
										Greece	1	2,104			
4	17,239			2	2,600								52	127,735	42
													1	2,823	43
													17	88,704	44
										Italy	1	4,416	3	7,649	45
													14	3,597	46
										Spain	2	6,748	19	58,989	47
								1	4,225	Italy	1	2,807			
										Italy	1	3,663	7	21,875	48
										Russia	2	8,322			
1	2,694	1	2,445	1	1,129	5	10,218			Greece	7	18,303	49	113,372	49
										Spain	4	7,787			
10	70,585												46	135,072	50
													4	8,145	51
				1	1,927								8	18,475	52
										Italy	9	24,648			
										Panama	1	912			
										Mexico	1	2,174			
99	385,295	14	65,264	38	214,009	51	220,128	72	330,015	Spain	1	2,572	13,313	11,424,022	53
										China	1	3,709			
										Undocumented	1	1,284			
										Poland	1	5,107			
													2	5,433	54
													4	13,431	55
		14	15,624										249	41,789	56
		252	72,143							Spain	30	16,809	4,192	249,784	57
225	767,096	350	282,141	130	557,705	157	567,598	441	1,842,238		328	990,121	22,895	26,944,369	

No. 16.—STATEMENT showing the Description, Number and Tonnage of Canadian and United States Vessels trading on the Rivers and Lakes between Canada and the United States (exclusive of Ferriage) which arrived at each Port and Outport

N° 16.—ÉTAT indiquant la description, le nombre et le tonnage des navires canadiens et des États-Unis naviguant sur les rivières et les lacs entre le Canada et les États-Unis (à l'exclusion des traversiers) arrivés à chaque port ou port secondaire

VESSELS ARRIVED—NAVIRES ARRIVÉS

Ports and Outports — Ports et ports secondaires	Canadian—Canadiens						United States—États-Unis					
	Steam and motor—Vapeurs			Sail—Voiliers			Steam and Motor—Vapeurs			Sail—Voiliers		
	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Équipage	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Équipage	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Équipage	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Équipage
Amherstburg, Ont.	11	1,618	63				2,859	320,518	17,626			
Bath, Ont.	2	322	20	4	579	17						
Belleville, Ont.	80	78,829	1,288				21	101	50			
Blind River, Ont.							20	8,687	290	2	1,022	14
Bridgeburg, Ont.	902	902	1,497				750	1,968	1,344	21	7,140	42
Brighton, Ont.	9	38	18				12	50	24			
Brockville, Ont.	126	189,445	10,701	13	3,250	39	209	24,195	2,224			
Bruce Mines, Ont.	7	2,963	101				29	13,574	226	1	119	2
Byng Inlet, Ont.	18	45,366	422				55	159,749	1,462			
Cardinal, Ont.	50	12,687	603				4	500	38			
Chatham, Ont.	24	4,944	700				14	2,797	138			
Chicoutimi, Que.	3	3,531	60				6	8,313	123			
Chippawa, Ont.	79	161	157	4	66	10						
Cobourg, Ont.	716	2,317,251	25,320									
Cockburn Island, Ont.	4	82	20				38	9,216	275	2	1,185	14
Collingwood, Ont.	3	2,755	50				11	27,105	306			
Cornwall, Ont.							1	88	8			
Courtright, Ont.	19	18,262	278				151	648	231	4	2,776	19
Dawson, Y.T.				4	875	4	8	4,824	260	1	244	1
Depot Harbour, Ont.	32	47,885	535				60	149,678	92			
Deseronto, Ont.	2	6	7				2	6	4			
Dunnville, Ont.							1	1	3			
Erieau, Ont.	41	82,000	940				210	114,709	2,961			
Fort Francis, Ont.	5	200	30									
Fort William, Ont.	231	747,351	7,636	2	493	4	524	1,867,292	12,349	40	48,556	322
Gananoque, Ont.	106	318	106				2,528	14,134	3,238			
Georgeville, Que.	176	160	214	3	12	8						
Goderich, Ont.	4	7,720	104				20	64,811	603	1	2,553	10
Gore Bay, Ont.							10	3,963	134			
Hamilton, Ont.	197	262,450	5,100				11	8,513	202	8	3,337	8
Hull, Que.										102	14,553	204
Iroquois, Ont.	2	2	2				10	628	64			
Kenora, Ont.	3	8	3				144	5,542	607			
Key Harbour, Ont.	12	26,518	261				3	8,178	75			
Kingston, Ont.	837	621,791	29,342	102	17,921	401	489	6,601	933	2	188	7
Kingsville, Ont.	2	438	22				118	609	250			

Leamington, Ont							3	3	6				
Lévis, Que										16	1,791	32	
Little Current, Ont	25	46,456	534				7	13,568	156				
Magog, Que	1	50	4										
Meaford, Ont							2	2,868	55				
Michipicoten Harbour, Ont							20	19,786	413	8	15,603	68	
Midland, Ont	37	74,572	843				67	230,605	1,894				
Montreal, Que	881	943,263	16,746				458	382,980	8,469				
Morrisburg, Ont	3	150	24	3	1,110	9	15	737	59				
Napanee, Ont				4	740	20							
Niagara, Ont	807	388,495	31,991	9	9	9							
Niagara Falls, Ont	444	426,294	32,695										
Ottawa, Ont										13	1,735	26	
Owen Sound, Ont	11	20,766	238	2	1,326	16	24	62,540	622				
Parry Sound, Ont							21	27,253	2,483				
Paspebiac, Que	1	1,203	20				6	6,934	138				
Penetanguishene, Ont	1	97	8				2	3,279	48				
Picton, Ont	13	829	66	9	1,782	36							
Point Edward Ont	206	382,039	6,314	2	848	20	100	7,753	292	23	7,286	59	
Port Arthur, Ont	143	189,633	3,480				831	2,191,349	19,218	230	175,111	1,836	
Port Burwell, Ont	4	119	14				12	17,947	304				
Port Colborne, Ont	427	528,973	6,648	1	300	10	97	282,395	2,519	1	3,623	16	
Port Dalhousie, Ont	62	462	134				8	29	15				
Port Dover, Ont	189	1,463	541				480	137,557	12,289				
Port Hope, Ont	35	404	84				14	28	28				
Port Maitland, Ont	134	3,192	334				57	87,586	1,086				
Port McNicoll, Ont	18	55,538	459				37	142,133	1,058				
Port Stanley, Ont	17	9,250	250				157	250,122	8,496				
Prescott, Ont	141	201,934	10,140				113	8,844	1,232				
Quebec, Que	30	32,477	680				6	7,676	128	148	19,198	296	
Rainy River, Ont	117	303	114				53	343	87				
Rimouski, Que	58	62,948	1,164				2	2,458	46				
Rockport, Ont	27	81	27				1,809	11,585	2,751				
Sandwich, Ont	45	26,454	720	5	957	19	8,220	285,726	19,337	105	24,021	327	
Sarnia, Ont	468	47,432	2,141	70	18,267	323	690	471,271	34,248	54	79,493	368	
Sault Ste. Marie, Ont	480	453,479	6,075				362	569,205	5,253	9	4,905	68	
Sorel, Que	2	2,289	40				1	973	22	20	2,569	40	
St. Johns, Que				18	1,384	36	41	2,572	349	181	22,810	362	
Stickeen, B.C	1	3	1				31	1,754	173	1	15	1	
Thessalon, Ont	20	513	89				19	2,866	129				
Thorold, Ont										4	1,807	36	
Three Rivers, Que	11	13,728	220				36	36,403	791	95	18,429	190	
Toronto, Ont	914	902,278	64,025	6	2,968	29	86	24,714	733	2	792	4	
Trenton, Ont	6	966	60										
Valleyfield, Que				2	1,421	12							
Walkerville, Ont	18	12,433	330	2	1,616	30	2,626	68,164	6,796	15	51,143	228	
Wallaceburg, Ont	16	4,782	394	1	285	7	39	55,236	1,446				
Welland, Ont	25	29,345	493				21	20,672	425				
West Dock, Ont	37	8,317	417				224	8,734	752				
Whitby,Ont	5	25	10				3	294	14				
White Horse, Y.T				1	603	25							
Wiarton, Ont	1	1,327	27				1	2,858	33				
Windsor, Ont	92	145,891	5,911				1,142	644,790	15,585	3	823	4	
Wolfe Island, Ont	1	3	2	3	265	9							
Total	9,677	9,496,259	280,107	270	57,077	1,093	26,261	8,921,588	196,118	1,112	512,827	4,604	

No. 16.—Summary Statement of Canadian and United States Vessels trading on Inland Waters, which arrived at Canadian Ports and Outports

N° 16.—État sommaire des navires canadiens et des États-Unis naviguant sur les eaux intérieures, arrivés aux ports du Canada

RECAPITULATION—RÉCAPITULATION

—	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Équipage
Canadian—Canadiens;—Steam and motor—Vapeurs	9,677	9,496,259	280,107
Sail—Voiliers	270	57,077	1,093
United States—États-Unis:—Steam and motor—Vapeurs	26,261	8,921,588	196,118
Sail—Voiliers	1,112	512,827	4,604
Total	37,320	18,987,751	481,922

DESCRIPTION OF VESSELS—DESCRIPTION DES NAVIRES

Description	Vessels — Navires	Tons register — Tonnage enregistré
Steam—Vapeurs:—Screw—À hélice	25,395	16,404,342
Paddle—À aubes	2,013	1,944,096
Stern-wheel—Roue à l'arrière	9	5,427
Motor—Moteur	8,522	64,585
Sail—Voiliers:—Sailing—À voile	83	31,291
Barges—Barges	1,298	538,010
Total	37,320	18,987,751

No. 17.—STATEMENT showing the Description, Number and Tonnage of Canadian and United States Vessels trading on the Rivers and Lakes between Canada and the United States (exclusive of Ferriage), which Departed from each Port and Outport

N° 17.—ÉTAT indiquant la description, le nombre et le tonnage des navires canadiens des États-Unis naviguant sur les rivières et les lacs entre le Canada et les États-Unis (à l'exclusion des traversiers), partis de chaque port ou port secondaire

VESSELS DEPARTED—NAVIRES PARTIS

Ports and Outports — Ports et ports secondaires	Canadian—Canadiens						United States—Etats-Unis					
	Steam and motor—Vapeurs			Sail—Voiliers			Steam and Motor—Vapeurs			Sail—Voiliers		
	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Équipage	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Équipage	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Équipage	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Équipage
Amherstburg, Ont.	7	908	29				2,851	294,915	19,340			
Bath, Ont.	2	322	20	3	555	15						
Belleville, Ont.	88	79,309	1,345				19	59	39			
Blind River, Ont.							20	8,687	291	2	1,022	14
Bridgeburg, Ont.	1,139	1,139	1,971				743	1,758	1,366	22	440	44
Brighton, Ont.	9	38	18				10	40	20			
Brockville, Ont.	131	203,736	11,475	12	3,000	36	209	24,195	2,224			
Bruce Mines, Ont.	5	2,898	87				29	13,575	226	1	119	2
Byng Inlet, Ont.	13	34,349	308				56	161,975	1,488			
Cardinal, Ont.	48	12,687	603				4	500	38			
Chatham, Ont.	25	4,555	635	3	755	22	13	2,787	136			
Chippawa, Ont.	12	38	24	2	64	8						
Cobourg, Ont.	709	2,385,172	25,582									
Cockburn Island, Ont.	4	82	20				37	9,213	274	2	1,185	14
Collingwood, Ont.	3	8,364	78				12	30,977	318			
Cornwall, Ont.	2	2,408	39				1	88	8			
Courtright, Ont.	15	8,178	163	1	285	7	151	648	231	4	2,776	19
Dawson, Y. T.	3	6	3	4	875	4	8	4,824	245	1	244	1
Depot Harbour, Ont.	37	54,890	830				59	147,973	1,612			
Deseronto, Ont.	3	9	10				2	6	4			
Dunnville, Ont.							1	1	3			
Erieau, Ont.	43	82,020	932				212	115,536	2,982			
Fort Frances, Ont.	5	200	30									
Fort William, Ont.	99	282,426	2,517	1	82	1	529	1,850,756	14,987	40	48,578	332
Gananoque, Ont.	106	318	106				2,528	14,134	3,238			
Georgeville, Que.	176	160	214	3	12	8						
Goderich, Ont.	21	40,704	467				27	85,061	769	1	2,553	10
Gore Bay, Ont.							9	3,462	119			
Hamilton, Ont.	206	262,804	5,270				11	8,513	202	8	3,337	8
Hull, Que.										99	14,226	198
Iroquois, Ont.	2	2	2				10	628	64			
Kenora, Ont.	4	15	5				143	5,530	605			
Key Harbour, Ont.	5	10,718	107				3	8,178	76			
Kingston, Ont.	911	647,012	28,711	90	17,651	280	489	5,209	939			
Kingsville, Ont.	2	438	22				114	598	243			

No. 17.—STATEMENT showing the Description, Number and Tonnage of Canadian and United States Vessels trading on the Rivers and Lakes, etc.—*Concluded*

N° 17.—ÉTAT indiquant la description, le nombre et le tonnage des navires canadiens et des États-Unis naviguant sur les rivières et les lacs, etc.—*Fin*

VESSELS DEPARTED—*Concluded*—NAVIRES PARTIS—*Fin*

Ports and Outports — Ports et ports secondaires	Canadian—Canadiens						United States—Etats-Unis					
	Steam and motor—Vapeurs			Sail—Voiliers			Steam and Motor—Vapeurs			Sail—Voiliers		
	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Équipage	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Équipage	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Équipage	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Équipage
Leamington, Ont.							3	3	6			
Lévis, Que.										12	1,372	24
Little Current, Ont.	14	30,194	291				7	13,654	163			
Magog, Que.	1	50	4									
Meaford, Ont.							2	2,868	55			
Michipicoten Harbour, Ont.							20	19,786	413	8	15,603	68
Midland, Ont.	71	203,409	1,715				70	250,808	1,970			
Montreal, Que.	1,381	1,512,724	26,945	1	181	6	373	332,296	7,046			
Morrisburg, Ont.	1	1,146	19				15	805	61			
Napanee, Ont.				4	740	20						
Niagara, Ont.	680	266,517	22,290	9	9	18						
Niagara Falls, Ont.	610	570,205	44,288									
Ottawa, Ont.										10	1,413	20
Owen Sound, Ont.	23	50,765	626	3	1,991	20	25	70,413	666			
Parry Sound, Ont.							21	27,253	2,483			
Paspebiac, Que.	1	1,203	20				6	6,934	138			
Penetanguishene, Ont.							2	4,083	48			
Picton, Ont.	13	829	66	8	1,584	32						
Point Edward, Ont.	208	380,788	6,346	3	888	22	93	7,722	282	23	7,286	59
Port Arthur, Ont.	213	354,196	6,841				839	2,206,606	20,581	230	175,111	1,836
Port Burwell, Ont.	4	119	14				11	16,620	277			
Port Colborne, Ont.	606	1,292,070	11,071	1	300	10	93	267,386	2,342	1	3,623	16
Port Dalhousie, Ont.	73	6,702	253				9	230	26			
Port Dover, Ont.	189	1,445	536				462	137,406	12,227			
Port Hope, Ont.	36	305	81				15	30	30			
Port Maitland, Ont.	139	3,160	373				48	85,857	1,026			
Port McNicoll, Ont.	31	115,096	808				36	136,092	1,021			
Port Stanley, Ont.	19	11,655	290				157	250,122	8,496			
Prescott, Ont.	77	76,115	4,410				104	6,841	1,130			
Quebec, Que.	49	57,415	988	4	187	8	12	19,460	279	95	10,428	190
Rainy River, Ont.	132	529	177				68	395	102			
Rimouski, Que.	54	58,559	1,083				2	2,458	46			
Rockport, Ont.	27	81	27				1,809	11,585	2,751			
Sandwich, Ont.	47	27,764	747	5	859	15	8,218	233,485	20,943	104	25,615	742
Sarnia, Ont.	458	66,849	2,319	46	12,220	151	691	459,873	44,133	52	74,530	344
Sault Ste. Marie, Ont.	488	382,038	5,578				367	577,920	5,655	9	4,905	68

Sorel, Que.	6	6,321	117				1	973	22	20	2,569	40
St. John's, Que.				10	558	20	41	2,572	349	352	48,121	704
Stickeen, B.C.	2	6	3				31	1,758	215	1	15	1
Thessalon, Ont.	19	495	83				19	2,867	129			
Thorold, Ont.	94	106,810	1,509						4		1,805	4
Three Rivers, Que.	15	16,976	301				36	36,403	791	94	18,151	188
Toronto, Ont.	968	969,721	66,984	6	2,968	31	83	23,400	703	3	1,088	6
Trenton, Ont.	11	1,615	102									
Valleyfield, Que.				2	1,421	12						
Walkerville, Ont.	17	11,490	287	3	2,424	43	2,626	67,407	6,783	15	51,143	228
Wallaceburg, Ont.	23	6,637	445	6	1,710	42	39	55,236	1,446			
Welland, Ont.	73	81,577	1,454				21	20,672	423			
West Dock, Ont.	37	8,103	406				222	8,742	746			
Whitby, Ont.	4	20	9				4	296	16			
White Horse, Y.T.							1	603	25			
Wiarton, Ont.	1	1,327	27				1	2,858	33			
Windsor, Ont.	104	143,348	5,767	1	285	12	1,132	644,387	15,124	3	814	30
Wolfe Island, Ont.	1	3	2									
Total	10,855	10,952,282	297,325	231	51,604	843	26,135	8,816,991	212,840	1,216	518,072	5,210

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No. 17.—Summary Statement of Canadian and United States Vessels, trading on Inland Waters, which Departed from Canadian ports

N° 17.—État sommaire des navires canadiens et des États-Unis naviguant sur les eaux intérieures, partis des ports du Canada

RÉCAPITULATION—RECAPITULATION

—	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Équipage
Canadian—Canadiens:—Steam and Motor—Vapeurs	10,855	10,952,282	297,325
Sail—Voiliers	231	51,604	843
United States—Etats-Unis—Steam and Motor—Vapeurs	26,135	8,816,991	212,840
Sail—Voiliers	1,216	518,072	5,210
Total	38,437	20,338,949	516,218

DESCRIPTION OF VESSELS—DESCRIPTION DES NAVIRES

Description	Vessels — Navires	Tons register — Tonnage enregistré
Steam—Vapeurs:—Screw—À hélice	26,261	17,845,546
Paddle—À aubes	1,997	1,851,360
Stern-wheel—Roue à l'arrière	9	5,427
Motor—Moteur	8,723	66,940
Sail—Voiliers:—Sailing—À voiles	74	31,084
Barges—Barges	1,373	538,592
Total	38,437	20,338,949

No. 18.—Statement showing the Description, Number and Tonnage of Canadian and United States Vessels trading on the Rivers and Lakes between Canada and the United States (exclusive of Ferriage), which Arrived and Departed.

N° 18.—État indiquant la description, le nombre et le tonnage des navires canadiens et des États-Unis naviguant sur les rivières et les lacs entre le Canada et les États-Unis (à l'exclusion des traversiers) arrivés et partis.

—	Canadian—Canadiens			United States—États-Unis			Total		
	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Équipage	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Équipage	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Équipage
Arrived—Arrivés.	9,947	9,553,336	281,200	27,373	9,434,415	200,722	37,320	18,987,751	481,922
Departed—Partis.	11,086	11,003,886	298,168	27,351	9,335,063	218,050	38,437	20,338,949	516,218
Total.....	21,033	20,557,222	579,368	54,724	18,769,478	418,772	75,757	39,326,700	998,140

No. 19.—Statement of Vessels, British and Foreign, entered and cleared Coastwise from the undermentioned Ports and Outports

N° 19.—État des navires britanniques et étrangers déclarés à l'entrée et à la sortie comme cabotiers aux ports ou ports secondaires ci-après mentionnés

STEAMERS AND MOTOR BOATS—VAPEURS

Ports and Outports — Ports et ports secondaires	Vessels Arrived—Arrivés						Vessels Departed—Partis					
	British—Britanniques			Foreign—Étrangers			British—Britanniques			Foreign—Étrangers		
	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Équipage	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Équipage	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Équipage	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Équipage
Albert, N.B.	9	312	20				9	312	20			
Alberton, P.E.I.	1	174	8				1	174	8			
Alert Bay, B.C.	1,334	749,348	29,444				1,336	534,977	29,539			
Amherst, N.S.	23	1,124	94				23	1,124	94			
Amherstburg, Ont.	65	41,052	1,148				68	38,085	1,134			
Amherst Harbour, Que.	104	38,081	2,009				106	38,351	2,025			
Annapolis Royal, N.S.	109	10,154	711				107	9,818	697			
Antigonish, N.S.	45	3,551	308	1	671	17	45	3,551	309			
Anyox, B.C.	476	257,497	9,611				427	198,492	8,264			
Arichat, N.S.	1,054	73,861	7,594	1	300	12	1,054	73,861	7,594			
Aultsville, Ont.	52	11,856	985				52	11,856	985			
Baddeck, N.S.	610	102,753	5,962				600	94,583	5,821			
Bamfield, B.C.	586	141,524	2,396				584	141,554	7,479			
Barrington Passage, N.S.	719	28,709	5,256	17	647	66	731	27,190	5,001	21	808	82
Bath, Ont.	139	12,136	1,422				140	12,123	1,432			
Bathurst, N.B.	284	8,640	1,032				284	9,035	1,008			
Bear River, N.S.	105	40,793	1,254				103	37,935	1,214			
Belliveau's Cove, N.S.	92	1,970	188	2	52	6	88	2,409	190			
Belleville, Ont.	47	6,916	562				39	6,518	503	2	42	11
Blind River, Ont.	163	44,530	2,681				163	44,530	2,681			
Blubber Bay, B.C.	237	29,939	2,131				156	12,705	1,230			
Bonne Esperance, Que.	11	5,095	338				13	6,037	394			
Bridgeburg, Ont.	79	192	158				2	10	5			
Bridgetown, N.S.	37	2,284	228				37	2,284	228			
Bridgewater, N.S.	108	3,023	349	2	1,539	36	109	3,098	348			
Brighton, Ont.	3	12	6				4	16	8			
Britannia Beach, B.C.	628	154,379	11,016				623	147,353	10,849			
Brockville, Ont.	221	241,343	13,050				216	227,052	12,276			
Bruce Mines, Ont.	73	17,804	1,316				70	16,873	1,255			
Buctouche, N.B.	4	64	11	3	2,574	55	5	80	12	1	908	19
Butedale, B.C.	751	246,266	14,315				755	258,765	14,997			
Byng Inlet, Ont.	3	263	26				7	10,024	115			
Campbellton, N.B.	62	6,864	266	5	7,637	122	61	4,858	262	2	4,478	58
Campobello, N.B.	168	27,547	1,872				169	27,359	1,875	1	21	2
Canning, N.S.	14	1,764	126				14	1,764	126			

No. 19.—Statement of Vessels, British and Foreign, entered and cleared Coastwise—*Continued*

N° 19.—État des navires britanniques et étrangers déclarés à l'entrée et à la sortie comme cabotiers—*Suite*

STEAMERS AND MOTOR BOATS—*Con.*—VAPEURS—*Suite*

Ports and Outports — Ports et ports secondaires	Vessels Arrived—Arrivés						Vessels Departed—Partis					
	British—Britanniques			Foreign—Étrangers			British—Britanniques			Foreign—Étrangers		
	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Équipage	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Équipage	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Équipage	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Équipage
Canso, N.S.	1,467	183,612	15,124				1,488	184,412	15,319			
Caraquet, N.B.	24	1,349	113				24	1,349	113			
Carcross, Y.T.	90	67,140	2,633				90	67,140	2,627			
Cardinal, Ont.	13	3,536	130				14	4,689	151			
Chandler, Que.	31	13,656	550	28	31,758	605	31	13,656	550	28	31,758	608
Charlottetown, P.E.I.	545	179,191	7,767				514	144,453	6,613			
Chatham, N.B.	41	39,081	567	6	11,347	157	39	39,268	551	1	1,743	26
Chatham, Ont.	27	1,348	168				26	1,750	233			
Chemainus, B.C.	251	9,657	1,857				241	9,641	1,819			
Chester, N.S.	122	3,941	384	1	15	2	119	3,339	384	2	30	4
Cheticamp, N.S.	139	12,802	1,434				139	12,802	1,434			
Chicoutimi, Que.	98	128,262	4,525				115	148,316	5,051			
Chippawa, Ont.	82	165	164				10	31	20			
Clark's Harbour, N.S.	512	21,493	3,359	13	418	49	519	20,149	3,397	19	634	70
Clementsport, N.S.	20	1,221	122				20	1,221	122			
Cobourg, Ont.	12	2,403	123				17	8,743	204			
Cockburn Island, Ont.	110	32,611	2,099				110	32,611	2,099			
Collingwood, Ont.	66	58,451	1,404	4	9,813	114	66	52,280	1,212	8	19,352	220
Cornwall, Ont.	139	103,300	2,757				125	88,250	2,544			
Courtright, Ont.	47	34,974	601				50	45,052	714			
Dalhousie, N.B.	10	4,030	229				8	3,962	215			
Dawson, Y.T.	42	25,553	1,059	1	603	29	38	25,545	1,035	1	603	29
Depot Harbour, Ont.	22	88,862	596				17	79,857	478			
Deseronto, Ont.	33	3,433	294				32	3,430	292			
Digby, N.S.	948	254,631	14,581	5	144	15	956	254,160	15,581	2	120	9
Dunnville, Ont.	1	46	4				1	46	4			
Erieau, Ont.	23	6,488	252				24	6,533	241			
Fort William, Ont.	848	1,842,112	27,942				851	1,934,365	29,868			
Forty Mile, Y.T.				1	603	29				1	603	29
Freeport, N.S.	318	32,605	2,728	4	64	12	321	32,945	2,749	4	64	12
Gananoque, Ont.	82	16,950	1,366				83	17,106	1,315			
Gaspe, Que.	101	96,270	2,076				95	73,521	1,971			
Georgetown, P.E.I.	24	9,806	224				14	1,398	51			
Glace Bay, N.S.	2	22	6				2	22	6			
Goderich, Ont.	80	139,042	1,591	15	56,541	429	67	99,450	1,236			
Gore Bay, Ont.	347	94,637	5,652				342	93,653	5,579			
Grand Narrows, N.S.	77	5,684	489				77	5,684	489			
Guysboro, N.S.	367	30,001	2,948	11	9,188	214	367	31,079	2,964			
Halifax, N.S.	1,836	570,888	15,936	50	64,644	2,668	1,978	501,078	16,476	47	64,898	2,023

Hamilton, Ont.	398	356,814	7,620	2	1,468	37	212	191,475	4,111			
Hantsport, N.S.	25	2,347	136				24	2,338	130			
Havre St. Pierre, Que.	51	28,764	1,735				51	28,764	1,735			
Hillsboro, N.B.				1	773	19	1	39	2			
Hull, Que.	36	1,514	274				36	1,467	315			
Inverness, N.S.	2	158	24				2	158	24			
Iona, N.S.	251	24,868	1,303				251	24,868	1,303			
Iroquois, Ont.	56	12,768	1,008				56	12,768	1,008			
Isaacs Harbour, N.S.	134	28,854	1,746	8	120	24	133	28,827	1,744			
Joggin Mines, N.S.	4	112	12				4	112	12			
Kenora, Ont.	15	265	45	3	90	18	16	297	47	3	90	18
Kentville, N.S.	15	1,582	97				15	1,582	97			
Key Harbour, Ont.							8	15,949	164			
Kingsport, N.S.	1	84	7				1	84	7	1	1,345	24
Kingston, Ont.	557	410,636	11,487				524	369,178	11,433			
Kingsville, Ont.	217	47,313	2,379				217	45,109	2,368			
Ladner, B.C.	78	3,763	418				81	3,746	422			
Ladysmith, B.C.	1,495	190,608	16,578				1,471	188,095	16,530			
La Have, N.S.	188	12,752	1,078	1	6	2	179	13,091	1,025	1	6	2
Leamington, Ont.	392	84,233	4,283				392	85,401	4,189			
Levis, Que.	62	179,812	2,245				61	170,505	2,188			
Little Current, Ont.	224	82,885	5,117				233	95,678	5,353			
Liverpool, N.S.	84	10,631	387	8	5,416	119	89	9,224	284	4	760	26
Lockeport, N.S.	1	99	7				1	99	7			
Lords Cove, N.B.	95	4,925	525				116	5,029	562	2	21	4
Louisburg, N.S.	129	54,155	1,416	4	7,051	96	125	48,875	1,273	1	778	18
Lower East Pubnico, N.S.	99	3,245	733				101	3,308	743			
Lunenburg, N.S.	256	21,877	1,124	1	15	3	250	19,671	1,032	1	548	36
Mabou, N.S.	30	5,071	234				29	4,078	254			
Mahone Bay, N.S.	53	4,701	224				60	6,162	250			
Maitland, N.S.	13	1,198	82				14	1,324	91			
Margaree, N.S.	102	9,903	1,068				104	9,967	1,076			
Meaford, Ont.	44	12,873	906				43	12,852	900			
Meteghan River, N.S.	62	2,006	183				77	2,786	260			
Middleton, N.S.	1	118	7				1	118	7			
Midland, Ont.	211	394,117	5,810	11	59,975	349	184	273,716	4,123			
Moncton, N.B.	114	4,133	269	2	1,953	40	113	4,123	251			
Montague, P.E.I.	1	20	3				4	124	13			
Montmagny, Que.	6	492	31				6	492	31			
Montreal, Que.	4,934	4,400,526	117,985	55	101,128	1,365	4,391	3,690,654	105,116	117	116,888	2,280
Moose Factory, Ont.	1	1,115	52				1	1,115	52			
Morrisburg, Ont.	60	15,045	1,200				66	14,347	1,247			
Nanaimo, B.C.	3,152	1,050,887	59,590				3,136	1,029,567	59,648			
Napanee, Ont.	1	87	10				1	87	10			
Nelson, B.C.	1,660	604,734	28,586				1,654	609,737	28,525			
New Campbellton, N.S.	81	12,542	728				81	12,542	728			
Newcastle, N.B.	4	6,894	101	3	4,054	70				1	2,223	30
New Westminster, B.C.	1,458	328,987	16,545				1,538	334,239	16,990			
Niagara, Ont.	952	844,587	67,766				1,096	962,105	77,632			
Niagara Falls, Ont.	414	380,680	30,299				248	232,972	18,714			
North East Harbour, N.S.	87	4,054	670	1	1,283	27	87	4,054	670			
North Head, N.B.	168	6,961	555	1	9	2	178	7,363	606	1	9	2
North Sydney, N.S.	436	339,351	7,068	14	7,524	348	434	337,621	6,808	10	6,402	371
Ocean Falls, B.C.	989	524,717	25,839				973	657,428	25,300			
Ottawa, Ont.	117	14,496	1,547				115	14,097	1,605			
Owen Sound, Ont.	334	239,436	7,612	3	13,080	92	339	213,569	7,421			
Parrsboro, N.S.	473	33,327	2,684	4	2,598	68	474	33,202	2,686	1	499	16
Parry Sound, Ont.	78	34,242	1,656				78	34,242	1,644			

No. 19.—Statement of Vessels, British and Foreign, entered and cleared Coastwise—*Continued*

N° 19.—État des navires britanniques et étrangers déclarés à l'entrée et à la sortie comme cabotiers—*Suite*

STEAMERS AND MOTOR BOATS–*Con.*—VAPEURS–*Suite*

Ports and Outports — Ports et ports secondaires	Vessels Arrived—Arrivés						Vessels Departed—Partis					
	British—Britanniques			Foreign—Étrangers			British—Britanniques			Foreign—Étrangers		
	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Équipage	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Équipage	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Équipage	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Équipage
Paspebiac, Que.	127	14,855	1,001	4	4,652	92	123	13,588	961			
Penetanguishene, Ont.	1	97	9				4	180	19			
Perce, Que.	6	2,387	52	1	1,141	23	6	2,387	52	1	1,141	23
Picton, Ont.	226	33,673	2,281				227	33,659	2,287			
Pictou, N.S.	407	170,605	7,206	6	6,574	117	400	170,653	7,160	3	3,522	67
Pointe au Pic, Que.	17	8,864	482	2	1,368	33	17	8,864	483			
Point Edward, Ont.	318	478,532	12,193				310	480,896	12,183			
Port Alberni, B.C.	392	114,940	5,872				398	108,347	5,680			
Port Alfred, Que.	115	243,796	10,466	5	4,425	100	144	274,974	10,974	24	53,984	734
Port Arthur, Ont.	807	1,907,631	34,015				877	2,186,943	32,182			
Port Borden, P.E.I.	1	25	3				1	25	3			
Port Burwell, Ont.	15	502	77				14	427	69			
Port Clyde, N.S.	96	4,086	732				96	4,086	732			
Port Colborne, Ont.	1,405	2,200,349	28,835				1,278	1,418,445	24,568			
Port Dalhousie, Ont.	495	306,285	10,926	1	203	10	463	274,187	10,642			
Port Dover, Ont.	30	750	164				30	765	148	1	4	2
Port Elgin, Ont.	10	100	26				13	168	36			
Port Hastings, N.S.	36	3,794	293				37	4,534	307			
Port Hawkesbury, N.S.	261	27,163	1,833				259	24,055	1,759			
Port Hood, N.S.	244	20,202	2,651				242	20,002	2,664			
Port Hope, Ont.	14	1,801	75				11	1,778	62	1	2	2
Port La Tour, N.S.	119	4,946	813				119	4,946	813			
Port Maitland, Ont.	42	1,832	197	10	121	26	30	1,239	164	3	40	9
Port McNicoll, Ont.	201	531,789	8,993				189	481,183	8,694			
Port Menier, Que.	154	121,246	3,303				154	121,246	3,301			
Port Morien, N.S.	17	2,208	130				17	2,208	130			
Port Mulgrave, N.S.	1,174	92,400	9,715				1,175	94,529	9,754			
Port Stanley, Ont.	72	48,213	1,112				20	1,555	110			
Port Williams, N.S.	17	1,006	119	2	1,876	36	17	1,006	119			
Powell River, B.C.	1,701	456,170	44,199				1,709	625,963	50,348			
Prescott, Ont.	390	375,623	21,083				322	428,506	24,267			
Prince Rupert, B.C.	2,005	835,196	43,357				2,029	905,260	38,505			
Quatsino, B.C.	129	71,477	3,140	8	28,289	272	154	91,829	3,669	3	12,223	124
Quebec, Que.	1,691	1,882,110	58,390	62	174,149	2,638	1,876	3,295,066	106,826	67	185,379	2,716
Rainy River, Ont.	18	334	55				17	310	52			
Richibucto, N.B.	16	242	50	3	3,228	62	21	311	63			
Rimouski, Que.	338	88,788	2,839	4	3,570	71	283	28,530	1,748			
Riviere du Loup, Que.	133	18,608	1,462				134	18,754	1,472			
Riverport, N.S.	137	7,590	604				154	7,239	657			

Rockport, Ont.	53	12,084	1,010				53	12,084	1,010			
Salmon River, N.S.	20	563	48				21	1,043	56			
Sandy Cove, N.S.	95	4,918	497				93	4,842	491			
Sandy Point, N.S.	67	3,254	357	4	172	58	67	3,041	349	1	42	14
Sandwich, Ont.	35	10,211	394				36	8,202	380			
Sarnia, Ont.	354	265,238	5,398				370	249,040	5,448			
Sault Ste. Marie, Ont.	1,627	1,408,425	47,140				1,636	1,447,748	47,095			
Shediac, N.B.	21	243	47				30	320	68			
Sheet Harbour, N.S.	134	28,315	2,104	5	5,310	109	223	32,169	2,049			
Shelburne, N.S.	71	3,163	382	2	93	25	70	3,086	353	1	57	7
Sherbrooke, N.S.	51	8,889	548	11	9,768	235	44	4,377	424			
Shippegan, N.B.	222	4,502	638	1	1,206	21	220	4,481	633			
Sidney, B.C.	258	27,519	2,112	1	2,565	30	293	39,848	2,488	3	4,392	87
Smith Falls, Ont.	29	4,553	406				29	4,553	406			
Sorel, Que.	583	1,407,528	35,484				575	1,404,475	35,291			
Souris, P.E.I.	131	57,534	2,952				129	57,452	2,931			
Steveston, B.C.	425	13,860	1,625				494	15,435	1,823			
Stewart, B.C.	173	181,944	6,747				224	222,810	9,126			
Stickeen, B.C.	1	3	1	31	1,754	174	2	6	3	31	1,758	215
St. Andrews, N.B.	523	28,864	2,423				563	30,371	2,530	1	7	2
Saint George, N.B.	39	2,371	294				40	2,354	296			
St. John, N.B.	1,886	381,032	20,303	20	11,080	217	1,989	646,611	23,508	43	47,081	877
St. Peters, N.S.	224	16,476	1,570	19	15,072	342	224	16,453	1,568	2	1,589	36
St. Stephen, N.B.	149	11,328	856				150	10,928	848	2	1,393	34
Summerside, P.E.I.	16	7,395	199				13	5,341	143			
Sydney, N.S.	810	1,375,212	20,795	110	189,119	2,196	781	1,230,069	17,378	36	37,944	915
Thessalon, Ont.	242	85,218	4,851				240	71,021	4,827			
Thorold, Ont.	101	113,773	2,011				7	7,118	121			
Three Rivers, Que.	1,213	1,961,582	45,502				1,210	1,822,227	45,082			
Toronto, Ont.	1,068	906,557	26,452				941	767,437	21,975			
Trenton, Ont.	41	4,720	374				36	4,071	335			
Trois Pistoles, Que.	2	88	6				1	44	3			
Truro, N.S.	14	1,764	126				14	1,764	126			
Union Bay, B.C.	812	148,231	12,002				808	138,038	12,087			
Valleyfield, Que.	3	426	26				3	426	26			
Vancouver, B.C.	14,122	4,584,068	251,907				13,862	4,207,569	253,626			
Victoria, P.E.I.	65	13,117	550				63	12,092	518			
Victoria, B.C.	4,215	2,709,880	132,438	33	129,020	1,105	4,347	2,980,244	128,751	97	199,404	3,059
Walkerville, Ont.	146	87,944	2,331				150	77,863	2,336			
Wallaceburg, Ont.	129	38,685	983				124	36,938	939			
Welland, Ont.	104	103,332	2,035				7	5,725	118			
West Dock, Ont.	214	43,457	2,354				214	46,766	2,354			
Westport, N.S.	335	33,028	2,782	4	31	9	345	33,253	2,810	4	56	9
Weymouth, N.S.	149	7,714	570	9	3,773	84	143	5,645	516	5	58	13
Whitby, Ont.	3	225	22	1	2	2	3	225	20			
White Horse, Y.T.	108	46,141	1,755	1	603	25	109	46,253	1,765	1	603	25
White Rock, B.C.	6	196	32				7	301	42			
Wiarton, Ont.	8	1,834	74	1	5	1	10	1,915	81			
Windsor, N.S.	134	45,034	1,571	17	15,641	329	131	46,547	1,553	3	2,614	59
Windsor, Ont.	244	210,896	5,695				218	206,147	5,315			
Winnipeg, Man.	13	707	132				17	965	172			
Wolfville, N.S.	15	1,882	133				15	1,882	133			
Yarmouth, N.S.	517	38,116	3,562				507	37,221	3,520	10	127	27
York Factory, Man.	3	3,132	74				3	3,132	74			
Total	83,714	43,810,823	1,656,274	670	1,019,911	15,765	82,680	43,076,773	1,741,032	626	809,051	15,085

No. 19.—Statement of Vessels, British and Foreign, entered and cleared Coastwise—*Continued*

N° 19.—État des navires britanniques et étrangers déclarés à l'entrée et à la sortie comme cabotiers—*Suite*

SAILING VESSELS—VOILIERS

Ports and Outports — Ports et ports secondaires	Vessels Arrived—Arrivés						Vessels Departed—Partis					
	British—Britanniques			Foreign—Étrangers			British—Britanniques			Foreign—Étrangers		
	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Équipage	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Équipage	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Équipage	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Équipage
Albert, N.B.	5	693	16				4	194	9			
Alberton, P.E.I.	17	684	50				15	612	451			
Amherst, N.S.	16	810	44				16	810	44			
Amherst Harbour, Que.	16	829	50	1	92	7	22	1,206	80			
Annapolis Royal, N.S.	82	2,327	231	1	198	7	80	2,108	199			
Antigonish, N.S.	88	3,154	192				89	3,167	194			
Anyox, B.C.	31	16,786	24				34	17,891	26			
Arichat, N.S.	163	5,775	387				162	5,700	381			
Baddeck, N.S.	212	6,449	423				203	7,342	561			
Bath, Ont.	2	48	4				2	48	4			
Bear River, N.S.	2	294	9				2	356	11			
Belliveau's Cove, N.S.	10	2,594	46	1	198	6	7	1,769	36	1	198	6
Bridgetown, N.S.							2	227	7			
Bridgewater, N.S.	22	6,607	93	1	509	7	5	888	21			
Britannia Beach, B.C.	37	21,792	133				38	22,443	137			
Brockville, Ont.	2	500	6				3	750	9			
Buctouche, N.B.	4	213	13				4	213	13			
Campbellton, N.B.	14	1,346	56				12	673	48			
Canning, N.S.	25	854	53	1	352	7	26	912	56	1	352	7
Canso, N.S.	286	16,603	964				289	13,670	985			
Caraquet, N.B.	32	1,425	102				32	1,423	101			
Cardigan, P.E.I.	30	939	74				30	939	77			
Chandler, Que.	1	11	5				1	11	5			
Charlottetown, P.E.I.	291	25,617	748				300	28,793	792			
Chatham, N.B.	61	3,001	225				62	3,018	226			
Chatham, Ont.	21	5,985	147				17	4,845	119			
Chemainus, B.C.	96	64,493	344				96	64,500	346			
Cheticamp, N.S.	28	1,443	80				29	1,456	84			
Cobourg, Ont.							2	379	17			
Courtright, Ont.	9	3,611	81				8	3,326	74			
Dalhousie, N.B.	4	699	15				4	99	14			
Dawson, Y.T.	14	2,660	14	2	660	2	15	2,818	16	1	342	1
Digby, N.S.	1	214	5				1	214	5			
Erieau, Ont.	1	15	4									
Fort William, Ont.	8	21,119	102				9	16,541	96			
Gaspe, Que.	28	3,779	114				25	2,341	106			
Georgetown, P.E.I.	123	5,291	298				122	5,283	290			
Glace Bay, N.S.	27	943	84	12	263	97	28	963	91	12	263	97
Goderich, Ont.				1	2,553	10						

Grand Narrows, N.S.	2	135	5				2	135	5			
Great Village, N.S.	4	256	12				4	256	12			
Guysboro, N.S.	40	1,971	56				40	1,971	85			
Halifax, N.S.	376	28,089	1,508	4	3,151	32	116	11,990	610	2	1,270	15
Hantsport, N.S.	4	328	10				4	328	10			
Hillsboro, N.B.	1	483	1				1	483	1			
Hull, Que.	95	16,903	190				105	18,719	210			
Iona, N.S.	8	330	24				8	330	24			
Isaacs Harbour, N.S.	16	1,097	55				17	1,082	57			
Joggin Mines, N.S.	9	591	22				8	251	16			
Kentville, N.S.	22	509	46				22	509	46	1	198	4
Kingsport, N.S.	17	752	42				17	752	42	1	352	7
Kingston, Ont.	32	27,294	192				35	29,876	221			
Ladysmith, B.C.	680	687,238	3,671				687	676,085	3,672			
La Have, N.S.	40	9,612	270				41	10,093	240			
Lévis, Que.										3	305	6
Liverpool, N.S.	9	1,019	31				9	1,163	34			
Lockeport, N.S.	27	960	99	5	110	13	22	718	59	2	60	9
Louisburg, N.S.	21	1,291	69				26	1,552	90			
Lunenburg, N.S.	50	6,579	345				57	11,809	245	1	629	3
Mabou, N.S.	8	501	24				8	501	24			
Mahone Bay, N.S.	10	2,277	47				11	1,177	76			
Maitland, N.S.	4	700	21				5	1,007	27			
Margaree, N.S.	13	406	48				12	396	43			
Meaford, Ont.	3	1,368	20				3	1,368	20			
Meteghan River, N.S.	4	1,411	20				4	1,411	24			
Middleton, N.S.	1	480	8									
Midland, Ont.	18	46,640	231				17	43,925	219			
Moncton, N.B.	1	121	4				2	765	12			
Montague, P.E.I.	61	2,492	157				50	1,976	111			
Montmagny, Que.	31	6,591	63				31	6,591	63			
Montreal, Que.	490	194,371	1,620	21	2,663	42	522	198,728	1,683	22	2,352	38
Moose Factory, Ont.	1	107	15				1	107	15			
Morrisburg, Ont.	1	370	7				1	607	8			
Murray Harbour, P.E.I.	128	4,454	283				128	4,467	279			
Nanaimo, B.C.	46	31,240	156				46	29,746	171			
Nelson, B.C.	1,235	656,741	2,250				1,200	510,733	2,225			
New Campbellton, N.S.	9	665	29				9	665	29			
Newcastle, N.B.	45	3,937	136	2	757	21	41	1,553	113			
New Glasgow, N.S.	47	1,109	96				47	1,117	94			
New Westminster, B.C.	271	183,766	1,043				269	188,682	1,053			
Niagara, Ont.	1	300	4				1	300	4			
North Head, N.B.	2	246	6				4	685	16			
North Sydney, N.S.	614	43,305	2,448	2	317	28	663	30,661	2,727	3	461	35
Ocean Falls, B.C.	13	24,092	73				7	12,236	42			
Owen Sound, Ont.	4	2,652	28				5	3,315	35			
Parrsboro, N.S.	148	26,447	585	6	1,684	30	124	19,252	445	2	308	8
Paspebiac, Que.	2	49	5				3	392	12			
Penetanguishene, Ont.							1	50	4			
Picton, Ont.							1	198	4			
Pictou, N.S.	191	19,617	524				189	18,726	508			
Pointe au Pic, Que.	5	405	15				5	405	15			
Point Edward, Ont.	71	57,368	1,065				71	57,368	1,065			
Port Arthur, Ont.	8	20,371	104				9	23,156	110			
Port Borden, P.E.I.	2	25	4				3	39	6			
Port Colborne, Ont.	4	1,920	33				31	9,807	308			
Port Dalhousie, Ont.	2	796	14				3	834	23			
Port Elgin, N.B.	29	1,346	83				28	1,333	81			

No. 19.—Statement of Vessels, British and Foreign, entered and cleared Coastwise—*Concluded*

N° 19.—État des navires britanniques et étrangers déclarés à l'entrée et à la sortie comme cabotiers—*Fin*

SAILING VESSELS—*Concluded*—VOILIERS—*Fin*

Ports and Outports — Ports et ports secondaires	Vessels Arrived—Arrivés						Vessels Departed—Partis					
	British—Britanniques			Foreign—Étrangers			British—Britanniques			Foreign—Étrangers		
	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Équipage	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Équipage	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Équipage	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Équipage
Port Hastings, N.S.	91	3,360	209				92	3,451	213			
Port Hawkesbury, N.S.	110	10,575	329				120	10,151	384			
Port Hood, N.S.	8	357	20				10	357	20			
Port Hope, Ont.	1	198	4				1	198	4			
Port Menier, Que.	1	597	12				1	597	12			
Port Morien, N.S.	1	16	2				1	16	2			
Port Mulgrave, N.S.	18	1,370	57				17	873	41			
Port Wade, N.S.	11	368	32				7	254	21			
Port Williams, N.S.	2	79	5				2	79	5			
Powell River, B.C.	1	2,160	8				1	2,160	8			
Prescott, Ont.	2	321	5				2	321	5			
Prince Rupert, B.C.	25	41,511	141				33	43,242	152			
Quatsino, B.C.							1	2,160	8			
Quebec, Que.	261	18,557	1,007	13	1,314	32	257	17,851	986	68	10,887	136
Richibucto, N.B.	54	3,966	180	1	627	8	50	2,862	165			
Rimouski, Que.	2	750	8				1	732	6			
Riverport, N.S.	20	2,785	106				40	5,051	353			
Sackville, N.B.	2	94	4				2	94	4			
Sandy Point, N.S.	7	1,622	36	3	1,930	22	3	1,007	18	2	1,521	15
Sandwich, Ont.	9	5,455	104				8	4,647	89			
Sarnia, Ont.	124	57,908	1,209				148	63,442	1,360			
Shediac, N.B.	1	77	5				1	77	5			
Sheet Harbour, N.S.	105	5,614	322				23	2,774	87			
Shelburne, N.S.	9	2,019	51				2	578	8			
Sherbrooke, N.S.	16	2,534	61				16	2,048	58			
Sidney, B.C.	3	3,404	26				3	3,504	18			
Sorel, Que.	26	21,257	144				29	22,250	156			
Souris, P.E.I.	51	3,533	136				50	2,758	137			
Stewart, B.C.	28	17,143	24				28	17,120	26			
Stickeen, B.C.				1	15	1				1	15	1
St. George, N.B.										1	146	4
St. John, N.B.	40	7,562	148	3	748	15	75	19,069	331	5	1,153	17
St. Johns, Que.	2	20	4				3	30	6			
St. Peters, N.S.	56	2,542	170				59	2,696	175			
St. Stephen, N.B.							1	393	6	2	1,018	14
Summerside, P.E.I.	93	4,298	343				95	5,973	364			
Sydney, N.S.	418	23,121	1,387	2	306	15	418	23,685	1,383	3	538	35
Three Rivers, Que.	318	107,164	876				319	107,670	886			
Tignish, P.E.I.	15	1,289	128				17	1,319	132			

Toronto, Ont.	10	7,214	49				15	9,044	74			
Trenton, Ont.	2	902	4				2	902	4			
Trois Pistoles, Que.	5	268	17				3	162	10			
Truro, N.S.	14	1,531	45	2	732	11	12	809	36	1	425	5
Union Bay, B.C.	23	33,964	115				26	38,627	130			
Valleyfield, Que.	5	731	10				5	731	10			
Vancouver, B.C.	1,426	1,262,897	6,540				1,504	1,325,080	6,821			
Victoria, P.E.I.	19	1,418	51				18	1,347	50			
Victoria, B.C.	64	55,476	267				73	58,333	258			
Walkerville, Ont.	61	48,242	901				67	53,090	991			
Wallaceburg, Ont.	39	11,115	273				35	9,875	245			
Welland, Ont.	2	930	18				2	930	18			
Westport, N.S.	1	310	6				2	452	9	1	198	6
Weymouth, N.S.	7	1,922	38				3	845	17			
White Horse, Y.T.	22	4,079	22				21	3,897	21			
Wiarton, Ont.	2	704	12				3	1,056	17			
Windsor, N.S.	79	10,696	267	4	1,568	27	67	6,355	194	1	509	8
Windsor, Ont.	63	44,581	845				63	46,720	883			
Wolfville, N.S.	14	775	39				20	1,994	69			
Yarmouth, N.S.							11	5,058	74	2	668	12
Total	10,574	4,195,107	39,975	89	20,747	440	10,460	4,097,105	40,677	139	24,168	481

No. 19.—Statement of Vessels, British and Foreign, entered and cleared Coastwise.

N° 19.—État des navires britanniques et étrangers déclarés à l'entrée et à la sortie comme cabotiers

RECAPITULATION—RÉCAPITULATION

—	Steamers — Vapeurs			Sailing Vessels — Voiliers			Total		
	Vessels — Navires	Tonnage — Tonnage	Crew — Équipage	Vessels — Navires	Tonnage — Tonnage	Crew — Équipage	Vessels — Navires	Tonnage — Tonnage	Crew — Équipage
Arrived—Arrivés—									
British—Britanniques	83,714	43,810,823	1,656,274	10,574	4,195,107	39,975	94,288	48,005,930	1,696,249
Foreign—Étrangers...	670	1,019,911	15,765	89	20,747	440	759	1,040,658	16,205
Total.....	84,384	44,830,734	1,672,039	10,663	4,215,854	40,415	95,047	49,046,588	1,712,454
Departed—Partis—									
British—Britanniques	82,680	43,076,773	1,741,032	10,460	4,097,105	40,677	93,140	47,173,878	1,781,709
Foreign—Étrangers...	626	809,051	15,085	139	24,168	481	765	833,219	15,566
Total.....	83,306	43,885,824	1,756,117	10,599	4,121,273	41,158	93,905	48,007,097	1,797,275

DESCRIPTION OF VESSELS—DESCRIPTION DES NAVIRES

—	Arrived—Arrivés		Departed—Partis		Total	
	Vessels — Navires	Tonnage — Tonnage	Vessels — Navires	Tonnage — Tonnage	Vessels — Navires	Tonnage — Tonnage
Steamers and motors—Vapeurs—						
Screw—Hélice.....	70,520	41,877,339	69,474	40,940,827	139,994	82,818,166
Paddle—Aubes.....	2,560	1,709,832	2,589	1,705,320	5,149	3,415,152
Stern-wheel—Roue à l'arrière.....	947	673,102	955	678,473	1,902	1,351,575
Motor—Moteur.....	10,357	570,461	10,288	561,204	20,645	1,131,665
Total.....	84,384	44,830,734	83,306	43,885,824	167,690	88,716,558
Sailing Vessels—Voiliers—						
Sailing—A voile.....	5,101	370,626	4,806	335,497	9,907	706,123
Barges—Barges.....	5,562	3,845,228	5,793	3,785,776	11,355	7,631,004
Total.....	10,663	4,215,854	10,599	4,121,273	21,262	8,337,127
Grand total.....	95,047	49,046,588	93,905	48,007,097	188,952	97,053,685

RECAPITULATION—RÉCAPITULATION

No. 20.—Statement showing the Total Number and Tonnage of all Vessels, Arrived and Departed by Provinces, Ports and Outports

N° 20.—État indiquant le nombre total et le tonnage de tous les navires entrés et sortis, par provinces, ports et ports secondaires

NOVA SCOTIA—NOUVELLE-ÉCOSSE

Ports and Outports — Ports et ports secondaires	Sea going—Long-courriers				Coastwise—Cabotiers				Rivers and Lakes-Rivières et lacs				Total			
	Arrived — Arrivés		Departed — Partis		Arrived — Arrivés		Departed — Partis		Arrived — Arrivés		Departed — Partis		Arrived — Arrivés		Departed — Partis	
	Vessels — Navires	Tons register — Tonnage enregistré	Vessels — Navires	Tons register — Tonnage enregistré	Vessels — Navires	Tons register — Tonnage enregistré	Vessels — Navires	Tons register — Tonnage enregistré	Vessels — Navires	Tons register — Tonnage enregistré	Vessels — Navires	Tons register — Tonnage enregistré	Vessels — Navires	Tons register — Tonnage enregistré	Vessels — Navires	Tons register — Tonnage enregistré
Amherst	3	292	3	439	39	1,934	39	1,934	.....	.....	.....	.....	42	2,226	42	2,373
Joggin Mines	1	160	2	500	13	703	12	363	.....	.....	.....	.....	14	863	14	863
Annapolis Royal	6	568	10	1,001	192	12,679	187	11,926	.....	.....	.....	.....	198	13,247	197	12,927
Bridgetown	1	203	.....	.....	37	2,284	39	2,511	.....	.....	.....	.....	38	2,487	39	2,511
Clementsport	4	396	4	396	20	1,221	20	1,221	.....	.....	.....	.....	24	1,617	24	1,617
Port Wade	2	190	6	299	11	368	7	254	.....	.....	.....	.....	13	558	13	553
Antigonish	.....	.....	1	671	134	7,376	134	6,718	.....	.....	.....	.....	134	7,376	135	7,389
Arichat	35	696	40	1,057	1,218	79,936	1,216	79,561	.....	.....	.....	.....	1,253	80,632	1,256	80,618
St. Peters	2	958	18	13,935	299	34,090	285	20,738	.....	.....	.....	.....	301	35,048	303	34,673
Baddeck	47	38,101	70	47,590	822	109,202	803	101,925	.....	.....	.....	.....	869	147,303	873	149,515
Iona	.....	.....	.....	.....	259	25,198	259	25,198	.....	.....	.....	.....	259	25,198	259	25,198
New Campbellton	.....	.....	1	19	90	13,207	90	13,207	.....	.....	.....	.....	90	13,207	91	13,226
Barrington Passage	15	585	11	311	736	29,356	752	27,998	.....	.....	.....	.....	751	29,941	763	28,309
Clark's Harbour	44	1,425	32	482	525	21,911	538	20,783	.....	.....	.....	.....	569	23,336	570	21,265
Port La Tour	2	28	2	28	119	4,946	119	4,946	.....	.....	.....	.....	121	4,974	121	4,974

No. 20.—STATEMENT showing the Total Number and Tonnage of all Vessels, Arrived and Departed, by Provinces, Ports and Outports—*Continued*

N° 20.—ÉTAT indiquant le nombre total et le tonnage de tous les navires entrés et sortis, par provinces, ports et ports secondaires—*Suite*

NOVA SCOTIA-Continued—**NOUVELLE-ÉCOSSE**-suite

Ports and Outports — Ports et ports secondaires	Sea going—Long-courriers				Coastwise—Cabotiers				Rivers and Lakes-Rivières et lacs				Total			
	Arrived — Arrivés		Departed — Partis		Arrived — Arrivés		Departed — Partis		Arrived — Arrivés		Departed — Partis		Arrived — Arrivés		Departed — Partis	
	Vessels — Navires	Tons register — Tonnage enregistré	Vessels — Navires	Tons register — Tonnage enregistré	Vessels — Navires	Tons register — Tonnage enregistré	Vessels — Navires	Tons register — Tonnage enregistré	Vessels — Navires	Tons register — Tonnage enregistré	Vessels — Navires	Tons register — Tonnage enregistré	Vessels — Navires	Tons register — Tonnage enregistré	Vessels — Navires	Tons register — Tonnage enregistré
Bridgewater	31	32,871	50	40,826	133	11,678	114	3,986	.....	.....	.....	.....	164	44,549	164	44,812
Canso	137	16,928	130	17,987	1,753	200,215	1,777	198,082	.....	.....	.....	.....	1,890	217,143	1,907	216,069
Guysboro	3	2,508	13	11,419	418	41,160	407	33,050	.....	.....	.....	.....	421	43,668	420	44,469
Isaac's Harbour	24	441	32	561	158	30,071	150	29,909	.....	.....	.....	.....	182	30,512	182	30,470
Port Mulgrave	1	2,192	2	2,473	1,192	93,770	1,192	95,402	.....	.....	.....	.....	1,193	95,962	1,194	97,875
Sherbrooke	6	3,345	22	17,479	78	21,191	60	6,425	.....	.....	.....	.....	84	24,536	82	23,904
Digby	47	2,221	44	1,426	954	254,989	959	254,494	.....	.....	.....	.....	1,001	257,210	1,003	255,920
Bear River	9	17,730	12	20,668	107	41,087	105	38,291	.....	.....	.....	.....	116	58,817	117	58,959
Freeport	16	410	16	436	322	32,669	325	33,009	.....	.....	.....	.....	338	33,079	341	33,445
Sandy Cove	.....	.....	2	69	95	4,918	93	4,842	.....	.....	.....	.....	95	4,918	95	4,911
Westport	30	685	20	301	340	33,369	352	33,959	.....	.....	.....	.....	370	34,054	372	34,260
Glace Bay	41	1,228	42	1,248	41	1,228	42	1,248	.....	.....	.....	.....	82	2,456	84	2,496
Halifax	1,469	4,004,935	1,693	4,223,498	2,266	666,772	2,143	579,236	.....	.....	.....	.....	3,735	4,671,707	3,836	4,802,734
Sheet Harbour	8	7,227	14	11,827	244	39,239	246	34,943	.....	.....	.....	.....	252	46,466	260	46,770
Kentville	2	412	1	214	37	2,091	38	2,289	.....	.....	.....	.....	39	2,503	39	2,503
Canning	.....	.....	.....	.....	40	2,970	41	3,028	.....	.....	.....	.....	40	2,970	41	3,028
Kingsport	2	1,697	.....	.....	18	836	20	2,533	.....	.....	.....	.....	20	2,533	20	2,533
Port Williams	.....	.....	2	1,876	21	2,961	19	1,085	.....	.....	.....	.....	21	2,961	21	2,961
Wolfville	6	1,219	.....	.....	29	2,657	35	3,876	.....	.....	.....	.....	35	3,876	35	3,876

Liverpool	134	12,015	143	16,814	101	17,066	102	11,147	.....	.....	.....	.....	235	29,081	245	27,961
Lockeport	18	781	23	914	33	1,169	25	877	.....	.....	.....	.....	51	1,950	48	1,791
Lunenburg	296	33,274	329	30,897	307	28,471	309	32,657	.....	.....	.....	.....	603	61,745	638	63,554
Chester	31	456	31	438	123	3,956	121	3,369	.....	.....	.....	.....	154	4,412	152	3,807
La Have	42	7,014	46	5,685	229	22,370	221	23,190	.....	.....	.....	.....	271	29,384	267	28,875
Mahone Bay	6	586	2	195	63	6,978	71	7,339	.....	.....	.....	.....	69	7,564	73	7,534
Riverport	57	5,957	37	3,378	157	10,375	194	12,290	.....	.....	.....	.....	214	16,332	231	15,668
Middleton	.....	.....	1	480	2	598	1	118	.....	.....	.....	.....	2	598	2	598
New Glasgow	.....	.....	.....	.....	47	1,109	47	1,117	.....	.....	.....	.....	47	1,109	47	1,117
North Sydney	906	407,937	904	415,358	1,066	390,497	1,110	375,145	.....	.....	.....	.....	1,972	798,434	2,014	790,503
Grand Narrows	.....	.....	.....	.....	79	5,819	79	5,819	.....	.....	.....	.....	79	5,819	79	5,819
Parrsboro	98	40,345	124	49,984	631	64,056	601	53,261	.....	.....	.....	.....	729	104,401	725	103,245
Pictou	11	12,216	16	14,433	604	196,796	592	192,901	.....	.....	.....	.....	615	209,012	608	207,334
Port Hawkesbury	49	11,953	38	13,825	371	37,738	379	34,206	.....	.....	.....	.....	420	49,691	417	48,031
Port Hastings	1	744	.....	.....	127	7,154	129	7,985	.....	.....	.....	.....	128	7,898	129	7,985
Port Hood	.....	.....	.....	.....	252	20,559	252	20,359	.....	.....	.....	.....	252	20,559	252	20,359
Cheticamp	27	24,531	27	24,531	167	14,245	168	14,258	.....	.....	.....	.....	194	38,776	195	38,789
Inverness	.....	.....	.....	.....	2	158	2	158	.....	.....	.....	.....	2	158	2	158
Mabou	.....	.....	1	993	38	5,572	37	4,579	.....	.....	.....	.....	38	5,572	38	5,572
Margaree	.....	.....	.....	.....	115	10,309	116	10,363	.....	.....	.....	.....	115	10,309	116	10,363
Shelburne	97	6,712	115	8,501	82	5,275	73	3,721	.....	.....	.....	.....	179	11,987	188	12,222
North East Harbour	2	1,295	2	1,295	88	5,337	87	4,054	.....	.....	.....	.....	90	6,632	89	5,349
Port Clyde	1	1,641	1	1,641	96	4,086	96	4,086	.....	.....	.....	.....	97	5,727	97	5,727
Sandy Point	98	8,204	105	9,570	81	6,978	73	5,611	.....	.....	.....	.....	179	15,182	178	15,181
Sydney	302	571,902	421	866,305	1,340	1,587,758	1,238	1,292,236	.....	.....	.....	.....	1,642	2,159,660	1,659	2,158,541
Louisburg	132	34,242	137	44,468	154	62,497	152	51,205	.....	.....	.....	.....	286	96,739	289	95,673
Port Morien	.....	.....	.....	.....	18	2,224	18	2,224	.....	.....	.....	.....	18	2,224	18	2,224

No. 20.—STATEMENT showing the Total Number and Tonnage of all Vessels, Arrived and Departed, by Provinces Ports and Outports—*Continued*

N° 20.—ÉTAT indiquant le nombre total et le tonnage de tous les navires entrés et sortis, par provinces, ports et ports secondaires—*Suite*

NOVA SCOTIA-Concluded—**NOUVELLE-ÉCOSSE**-fin

Ports and Outports — Ports et ports secondaires	Sea going—Long-courriers				Coastwise—Cabotiers				Rivers and Lakes-Rivières et lacs				Total			
	Arrived — Arrivés		Departed — Partis		Arrived — Arrivés		Departed — Partis		Arrived — Arrivés		Departed — Partis		Arrived — Arrivés		Departed — Partis	
	Vessels — Navires	Tons register — Tonnage enregistré	Vessels — Navires	Tons register — Tonnage enregistré	Vessels — Navires	Tons register — Tonnage enregistré	Vessels — Navires	Tons register — Tonnage enregistré	Vessels — Navires	Tons register — Tonnage enregistré	Vessels — Navires	Tons register — Tonnage enregistré	Vessels — Navires	Tons register — Tonnage enregistré	Vessels — Navires	Tons register — Tonnage enregistré
Truro	1	140	5	1,638	30	4,027	27	2,998	.....	.....	.....	.....	31	4,167	32	4,636
Great Village	.....	.....	.....	.....	4	256	4	256	.....	.....	.....	.....	4	256	4	256
Weymouth	27	4,497	35	10,987	165	13,409	151	6,548	.....	.....	.....	.....	192	17,906	186	17,535
Belliveau's Cove	11	1,813	21	2,721	105	4,814	96	4,376	.....	.....	.....	.....	116	6,627	117	7,097
Meteghan River	11	837	4	518	66	3,417	81	4,197	.....	.....	.....	.....	77	4,254	85	4,715
Salmon River	1	480	.....	.....	20	563	21	1,043	.....	.....	.....	.....	21	1,043	21	1,043
Windsor	186	259,499	213	275,251	234	72,939	202	56,025	.....	.....	.....	.....	420	332,438	415	331,276
Hantsport	.....	.....	.....	.....	29	2,675	28	2,666	.....	.....	.....	.....	29	2,675	28	2,666
Maitland	2	732	1	425	17	1,898	19	2,331	.....	.....	.....	.....	19	2,630	20	2,756
Yarmouth	361	429,981	374	428,763	517	38,116	530	43,074	.....	.....	.....	.....	878	468,097	904	471,837
Lower East Pubnico	41	2,336	38	2,235	99	3,245	101	3,308	.....	.....	.....	.....	140	5,581	139	5,543
Nova Scotia Total	**4,943**	**6,021,771**	**5,489**	**6,651,279**	**20,419**	**4,492,791**	**20,171**	**3,980,067**	.....	.....	.....	.....	**25,362**	**10,514,562**	**25,660**	**10,631,346**
PRINCE EDWARD ISLAND—ÎLE DU PRINCE-ÉDOUARD																
Charlottetown	21	20,833	53	53,035	836	204,808	814	173,246	.....	.....	.....	.....	857	225,641	867	226,281
Cardigan	.....	.....	.....	.....	30	939	30	939	.....	.....	.....	.....	30	939	30	939
Georgetown	20	10,154	33	18,957	147	15,097	136	6,681	.....	.....	.....	.....	167	25,251	169	25,638
Montague	22	1,160	30	1,694	62	2,512	54	2,100	.....	.....	.....	.....	84	3,672	84	3,794
Murray Harbour	1	17	1	17	128	4,454	128	4,467	.....	.....	.....	.....	129	4,471	129	4,484
Souris	5	1,443	6	2,104	182	61,067	179	60,210	.....	.....	.....	.....	187	62,510	185	62,314
Victoria	.....	.....	2	1,025	84	14,535	81	13,439	.....	.....	.....	.....	84	14,535	83	14,464

Summerside	11	10,280	10	10,916	109	11,693	108	11,314					120	21,973	118	22,230
Alberton					18	858	16	786					18	858	16	786
Port Borden					3	50	4	64					3	50	4	64
Tignish					15	1,289	17	1,319					15	1,289	17	1,319
Prince Edward Island Total	**80**	**43,887**	**135**	**87,748**	**1,614**	**317,302**	**1,567**	**274,565**					**1,694**	**361,189**	**1,702**	**362,313**

NEW BRUNSWICK—NOUVEAU-BRUNSWICK

Bathurst	66	9,312	66	9,312	284	8,640	284	9,035					350	17,952	350	18,347
Caraquet	104	1,876	105	1,886	56	2,774	56	2,772					160	4,650	161	4,658
Shippegan	25	336	29	1,581	223	5,708	220	4,481					248	6,044	249	6,062
Campbellton	9	12,121	15	17,945	81	15,847	75	10,009					90	27,968	90	27,954
Dalhousie					14	4,729	12	4,061					14	4,729	12	4,061
Chatham	8	12,044	14	21,444	108	53,429	102	44,029					116	65,473	116	65,473
Buctouche	1	993	3	2,659	11	2,851	10	1,201					12	3,844	13	3,860
Richibucto	1	815	8	7,022	74	8,063	71	3,173					75	8,878	79	10,195
Moncton	7	2,915	8	4,223	117	6,207	115	4,888					124	9,122	123	9,111
Albert	1	200	2	699	14	1,005	13	506					15	1,205	15	1,205
Hillsboro	15	10,899	16	11,672	2	1,256	2	522					17	12,155	18	12,194
Shediac					22	320	31	397					22	320	31	397
Newcastle			11	11,743	54	15,642	42	3,776					54	15,642	53	15,519
Sackville					2	94	2	94					2	94	2	94
Port Elgin	2	20			39	1,446	41	1,501					41	1,466	41	1,501
St. Andrews	1,479	47,752	1,427	40,592	523	28,864	564	30,378					2,002	76,616	1,991	70,970
Campo Bello	807	43,719	755	40,017	168	27,547	170	27,380					975	71,266	925	67,397
Lord's Cove	902	12,009	823	12,880	95	4,925	118	5,050					997	16,934	941	17,930
North Head	301	29,429	310	29,877	171	7,216	183	8,057					472	36,645	493	37,934
St. John	1,182	1,459,320	1,059	1,156,393	1,949	400,422	2,112	713,914					3,131	1,859,742	3,171	1,870,307
St. George	71	6,305	70	6,182	39	2,371	41	2,500					110	8,676	111	8,682
St. Stephen	14	3,304	6	892	149	11,328	155	13,732					163	14,632	161	14,624
New Brunswick Total	**4,995**	**1,653,369**	**4,727**	**1,377,019**	**4,195**	**610,684**	**4,419**	**891,456**					**9,190**	**2,264,053**	**9,146**	**2,268,475**

No. 20.—STATEMENT showing the Total Number and Tonnage of all Vessels, Arrived and Departed, by Provinces, Ports and Outports—*Continued*

N° 20.—ÉTAT indiquant le nombre total et le tonnage de tous les navires entrés et sortis, par provinces, ports et ports secondaires—*Suite*

QUÉBEC

Ports and Outports — Ports et ports secondaires	Sea going—Long-courriers				Coastwise—Cabotiers				Rivers and Lakes-Rivières et lacs				Total			
	Arrived — Arrivés		Departed — Partis		Arrived — Arrivés		Departed — Partis		Arrived — Arrivés		Departed — Partis		Arrived — Arrivés		Departed — Partis	
	Vessels — Navires	Tons register — Tonnage enregistré	Vessels — Navires	Tons register — Tonnage enregistré	Vessels — Navires	Tons register — Tonnage enregistré	Vessels — Navires	Tons register — Tonnage enregistré	Vessels — Navires	Tons register — Tonnage enregistré	Vessels — Navires	Tons register — Tonnage enregistré	Vessels — Navires	Tons register — Tonnage enregistré	Vessels — Navires	Tons register — Tonnage enregistré
Chicoutimi	2	2,867	.....	.....	98	128,262	115	148,316	9	11,844	.....	.....	109	142,973	115	148,316
Port Alfred	60	104,563	14	23,743	120	248,221	168	328,958	.....	.....	.....	.....	180	352,784	182	352,701
Gaspe	22	32,281	32	43,320	129	100,049	120	75,862	.....	.....	.....	.....	151	132,330	152	119,182
Hull	.....	.....	.....	.....	131	18,417	141	20,186	102	14,553	99	14,226	233	32,970	240	34,412
Montreal	1,173	4,509,863	1,240	4,692,577	5,500	4,698,688	5,052	4,008,622	1,339	1,326,243	1,755	1,845,201	8,012	10,534,794	8,047	10,546,400
Paspebiac	3	2,004	.....	.....	133	19,556	126	13,980	7	8,137	7	8,137	143	29,697	133	22,117
Percé	.....	.....	.....	.....	7	3,528	7	3,528	.....	.....	.....	.....	7	3,528	7	3,528
Chandler	.....	.....	.....	.....	60	45,425	60	45,425	.....	.....	.....	.....	60	45,425	60	45,425
Quebec	474	2,587,935	273	1,133,369	2,027	2,076,130	2,268	3,509,183	184	59,351	160	87,490	2,685	4,723,416	2,701	4,730,042
Amherst Harbour	1	268	.....	.....	121	39,002	128	39,557	.....	.....	.....	.....	122	39,270	128	39,557
Bonne Espérance	18	6,574	17	6,555	11	5,095	13	6,037	.....	.....	.....	.....	29	11,669	30	12,592
Havre St. Pierre	10	8,500	10	8,500	51	28,764	51	28,764	.....	.....	.....	.....	61	37,264	61	37,264
Lévis	2	3,935	3	13,242	62	179,812	64	170,810	16	1,791	12	1,372	80	185,538	79	185,424
Montmagny	.....	.....	.....	.....	37	7,083	37	7,083	.....	.....	.....	.....	37	7,083	37	7,083
Pointe au Pic	.....	.....	2	1,368	24	10,637	22	9,269	.....	.....	.....	.....	24	10,637	24	10,637
Port Menier	.....	.....	.....	.....	155	121,843	155	121,843	.....	.....	.....	.....	155	121,843	155	121,843

Rivière du Loup	.....	.....	.....	.....	133	18,608	134	18,754	.....	.....	.....	.....	133	18,608	134	18,754
Trois Pistoles	.....	.....	.....	.....	7	356	4	206	.....	.....	.....	.....	7	356	4	206
Rimouski	12	60,081	68	76,639	344	93,108	284	29,262	60	65,406	56	61,017	416	218,595	408	166,918
Rock Island	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Georgeville	.....	.....	.....	.....	.....	.....	.....	.....	179	172	179	172	179	172	179	172
Magog	.....	.....	.....	.....	.....	.....	.....	.....	1	50	1	50	1	50	1	50
Sorel	8	22,397	19	16,642	609	1,428,785	604	1,426,725	23	5,831	27	9,863	640	1,457,013	650	1,453,230
St. Johns	.....	.....	.....	.....	2	20	3	30	240	26,766	403	51,251	242	26,786	406	51,281
Three Rivers	60	163,999	60	163,999	1,531	2,068,746	1,529	1,929,897	142	68,560	145	71,530	1,733	2,301,305	1,734	2,165,426
Valleyfield	.....	.....	.....	.....	8	1,157	8	1,157	2	1,421	2	1,421	10	2,578	10	2,578
Quebec, Total	**1,845**	**7,505,267**	**1,738**	**6,179,954**	**11,300**	**11,341,292**	**11,093**	**11,943,454**	**2,304**	**1,590,125**	**2,846**	**2,151,730**	**15,449**	**20,436,684**	**15,677**	**20,275,138**
ONTARIO																
Amherstburg	.....	.....	.....	.....	65	41,052	68	38,085	2,870	322,136	2,858	295,823	2,935	363,188	2,926	333,908
Kingsville	.....	.....	.....	.....	217	47,313	217	45,109	120	1,047	116	1,036	337	48,360	333	46,145
Leamington	.....	.....	.....	.....	392	84,233	392	85,401	3	3	3	3	395	84,236	395	85,404
West Dock	.....	.....	.....	.....	214	43,457	214	46,766	261	17,051	259	16,845	475	60,508	473	63,611
Belleville	.....	.....	.....	.....	47	6,916	41	6,560	101	78,930	107	79,368	148	85,846	148	85,928
Bridgeburg	.....	.....	.....	.....	79	192	2	10	1,673	10,010	1,904	3,337	1,752	10,202	1,906	3,347
Brockville	.....	.....	.....	.....	223	241,843	219	227,802	348	216,890	352	230,931	571	458,733	571	458,733
Chatham	.....	.....	.....	.....	48	7,333	43	6,595	38	7,741	41	8,097	86	15,074	84	14,692
Erieau	.....	.....	.....	.....	24	6,503	24	6,533	251	196,709	255	197,556	275	203,212	279	204,089

No. 20.—Statement showing the Total Number and Tonnage of all Vessels, Arrived and Departed, by Provinces, Ports and Outports—*Continued*

N° 20.—État indiquant le nombre total et le tonnage de tous les navires entrés et sortis, par provinces, ports et ports secondaires—*Suite*

ONTARIO-Continued—suite

Ports and Outports — Ports et ports secondaires	Sea going—Long-courriers				Coastwise—Cabotiers				Rivers and Lakes-Rivières et lacs				Total			
	Arrived — Arrivés		Departed — Partis		Arrived — Arrivés		Departed — Partis		Arrived — Arrivés		Departed — Partis		Arrived — Arrivés		Departed — Partis	
	Vessels — Navires	Tons register — Tonnage enregistré	Vessels — Navires	Tons register — Tonnage enregistré	Vessels — Navires	Tons register — Tonnage enregistré	Vessels — Navires	Tons register — Tonnage enregistré	Vessels — Navires	Tons register — Tonnage enregistré	Vessels — Navires	Tons register — Tonnage enregistré	Vessels — Navires	Tons register — Tonnage enregistré	Vessels — Navires	Tons register — Tonnage enregistré
Cobourg					12	2,403	19	9,122	716	2,317,251	709	2,385,172	728	2,319,654	728	2,394,294
Brighton					3	12	4	16	21	88	19	78	24	100	23	94
Collingwood					70	68,264	74	71,632	14	29,860	15	39,341	84	98,124	89	110,973
Meaford					47	14,241	46	14,220	2	2,868	2	2,868	49	17,109	48	17,088
Cornwall					139	103,300	125	88,250	1	88	3	2,496	140	103,388	128	90,746
Aultsville					52	11,856	52	11,856					52	11,856	52	11,856
Deseronto					33	3,433	32	3,430	4	12	5	15	37	3,445	37	3,445
Fort Frances									5	200	5	200	5	200	5	200
Rainy River					18	334	17	310	170	646	200	924	188	980	217	1,234
Fort William					856	1,863,231	860	1,950,906	797	2,663,692	669	2,181,842	1,653	4,526,923	1,529	4,132,748
Gananoque					82	16,950	83	17,106	2,634	14,452	2,634	14,452	2,716	31,402	2,717	31,558
Rockport					53	12,084	53	12,084	1,836	11,666	1,836	11,666	1,889	23,750	1,889	23,750
Goderich					96	198,136	67	99,450	25	75,084	49	128,318	121	273,220	116	227,768

Hamilton					400	358,282	212	191,475	216	274,300	225	274,654	616	632,582	437	466,129
Dunnville					1	46	1	46	1	1	1	1	2	47	2	47
Port Maitland					52	1,953	33	1,279	191	90,778	187	89,017	243	92,731	220	90,296
Kenora					18	355	19	387	147	5,550	147	5,545	165	5,905	166	5,932
Kingston					589	437,930	559	399,054	1,430	646,501	1,490	669,872	2,019	1,084,431	2,049	1,068,926
Wolfe Island									4	268	1	3	4	268	1	3
Midland					240	500,732	201	317,641	104	305,177	141	454,217	344	805,909	342	771,858
Penetanguishene					1	97	5	230	3	3,376	2	4,083	4	3,473	7	4,313
Morrisburg					61	15,415	67	14,954	21	1,997	16	1,951	82	17,412	83	16,905
Iroquois					56	12,768	56	12,768	12	630	12	630	68	13,398	68	13,398
Napanee					1	87	1	87	4	740	4	740	5	827	5	827
Bath					141	12,184	142	12,171	6	901	5	877	147	13,085	147	13,048
Niagara Falls					414	380,680	248	232,972	444	426,294	610	570,205	858	806,974	858	803,177
Chippawa					82	165	10	31	83	227	14	102	165	392	24	133
Niagara					953	844,887	1,097	962,405	816	388,504	689	266,526	1,769	1,233,391	1,786	1,228,931
North Bay																
Moose Factory					2	1,222	2	1,222					2	1,222	2	1,222
Ottawa					117	14,496	115	14,097	13	1,735	10	1,413	130	16,231	125	15,510
Smith Falls					29	4,553	29	4,553					29	4,553	29	4,553
Owen Sound					341	255,168	344	216,884	37	84,632	51	123,169	378	339,800	395	340,053
Wiarton					11	2,543	13	2,971	2	4,185	2	4,185	13	6,728	15	7,156
Parry Sound					78	34,242	78	34,242	21	27,253	21	27,253	99	61,495	99	61,495
Byng Inlet					3	263	7	10,024	73	205,115	69	196,324	76	205,378	76	206,348
Depot Harbour					22	88,862	17	79,857	92	197,563	96	202,863	114	286,425	113	282,720
Key Harbour							8	15,949	15	34,696	8	18,896	15	34,696	16	34,845
Picton					226	33,673	228	33,857	22	2,611	21	2,413	248	36,284	249	36,270

No. 20.—STATEMENT showing the Total Number and Tonnage of all Vessels, Arrived and Departed, by Provinces, Ports and Outports—*Continued*

N° 20.—ÉTAT indiquant le nombre total et le tonnage de tous les navires entrés et sortis, par provinces, ports et ports secondaires—*Suite*

ONTARIO-Concluded-Fin

Ports and Outports — Ports et ports secondaires	Sea going—Long-courriers				Coastwise—Cabotiers				Rivers and Lakes-Rivières et lacs				Total			
	Arrived — Arrivés		Departed — Partis		Arrived — Arrivés		Departed — Partis		Arrived — Arrivés		Departed — Partis		Arrived — Arrivés		Departed — Partis	
	Vessels — Navires	Tons register — Tonnage enregistré	Vessels — Navires	Tons register — Tonnage enregistré	Vessels — Navires	Tons register — Tonnage enregistré	Vessels — Navires	Tons register — Tonnage enregistré	Vessels — Navires	Tons register — Tonnage enregistré	Vessels — Navires	Tons register — Tonnage enregistré	Vessels — Navires	Tons register — Tonnage enregistré	Vessels — Navires	Tons register — Tonnage enregistré
Port Arthur					815	1,928,002	886	2,210,099	1,204	2,556,093	1,282	2,735,913	2,019	4,484,095	2,168	4,946,012
Port Hope					15	1,999	13	1,978	49	432	51	335	64	2,431	64	2,313
Port McNicoll					201	531,789	189	481,183	55	197,671	67	251,188	256	729,460	256	732,371
Prescott					392	375,944	324	428,827	254	210,778	181	82,956	646	586,722	505	511,783
Cardinal					13	3,536	14	4,689	54	13,187	52	13,187	67	16,723	66	17,876
Sarnia					478	323,146	518	312,482	1,282	616,463	1,247	613,472	1,760	939,609	1,765	925,954
Courtright					56	38,585	58	48,378	174	21,686	171	11,887	230	60,271	229	60,265
Point Edward					389	535,900	381	538,264	331	397,926	327	396,684	720	933,826	708	934,948
Sault Ste. Marie					1,627	1,408,425	1,636	1,447,748	851	1,027,589	864	964,863	2,478	2,436,014	2,500	2,412,611
Blind River					163	44,530	163	44,530	22	9,709	22	9,709	185	54,239	185	54,239
Bruce Mines					73	17,804	70	16,873	37	16,656	35	16,592	110	34,460	105	33,465
Cockburn Island					110	32,611	110	32,611	44	10,483	43	10,480	154	43,094	153	43,091
Gore Bay					347	94,637	342	93,653	10	3,963	9	3,462	357	98,600	351	97,115
Little Current					224	82,885	233	95,678	32	60,024	21	43,848	256	142,909	254	139,526
Michipicoten Harbour									28	35,389	28	35,389	28	35,389	28	35,389
Thessalon					242	85,218	240	71,021	39	3,379	38	3,362	281	88,597	278	74,383

Simcoe																
Port Dover					30	750	31	769	669	139,020	651	138,851	699	139,770	682	139,620
St. Catharines																
Port Dalhousie					498	307,284	466	275,021	70	491	82	6,932	568	307,775	548	281,953
Thorold					101	113,773	7	7,118	4	1,807	98	108,615	105	115,580	105	115,733
St. Thomas																
Port Stanley					72	48,213	20	1,555	174	259,372	176	261,777	246	307,585	196	263,332
Tillsonburg																
Port Burwell					15	502	14	427	16	18,066	15	16,739	31	18,568	29	17,166
Toronto					1,078	913,771	956	776,481	1,008	930,752	1,060	997,177	2,086	1,844,523	2,016	1,773,658
Trenton					43	5,622	38	4,973	6	966	11	1,615	49	6,588	49	6,588
Wallaceburg					168	49,800	159	46,813	56	60,303	68	63,583	224	110,103	227	110,396
Welland					106	104,262	9	6,655	46	50,017	94	102,249	152	154,279	103	108,904
Port Colborne					1,409	2,202,269	1,309	1,428,252	526	815,291	701	1,563,379	1,935	3,017,560	2,010	2,991,631
Whitby					4	227	3	225	8	319	8	316	12	546	11	541
Windsor					307	255,477	281	252,867	1,237	791,504	1,240	788,834	1,544	1,046,981	1,521	1,041,701
Sandwich					44	15,666	44	12,849	8,375	337,158	8,374	287,723	8,419	352,824	8,418	300,572
Walkerville					207	136,186	217	130,953	2,661	133,356	2,661	132,464	2,868	269,542	2,878	263,417
Ontario, Total					**15,835**	**15,432,502**	**14,875**	**14,073,371**	**34,969**	**17,389,308**	**35,540**	**18,178,888**	**50,804**	**32,821,810**	**50,415**	**32,252,259**

MANITOBA

Winnipeg					13	707	17	965					13	707	17	965
York Factory	1	1,115	1	1,115	3	3,132	3	3,132					4	4,247	4	4,247
Manitoba Total	**1**	**1,115**	**1**	**1,115**	**16**	**3,839**	**20**	**4,097**					**17**	**4,954**	**21**	**5,212**

No. 20.—Statement showing the Total Number and Tonnage of all Vessels, Arrived and Departed, by Provinces, Ports and Outports—*Concluded*

N° 20.—État indiquant le nombre total et le tonnage de tous les navires entrée et sortis, par provinces, ports et ports secondaires—*Fin*

BRITISH COLUMBIA—COLOMBIE BRITANNIQUE

Ports and Outports — Ports et ports secondaires	Sea going—Long-courriers				Coastwise—Cabotiers				Rivers and Lakes-Rivières et lacs				Total			
	Arrived — Arrivés		Departed — Partis		Arrived — Arrivés		Departed — Partis		Arrived — Arrivés		Departed — Partis		Arrived — Arrivés		Departed — Partis	
	Vessels — Navires	Tons register — Tonnage enregistré	Vessels — Navires	Tons register — Tonnage enregistré	Vessels — Navires	Tons register — Tonnage enregistré	Vessels — Navires	Tons register — Tonnage enregistré	Vessels — Navires	Tons register — Tonnage enregistré	Vessels — Navires	Tons register — Tonnage enregistré	Vessels — Navires	Tons register — Tonnage enregistré	Vessels — Navires	Tons register — Tonnage enregistré
Nanaimo	242	143,112	335	291,065	3,198	1,082,127	3,182	1,059,313	.....	.....	.....	.....	3,440	1,225,239	3,517	1,350,378
Chemainus	211	143,288	278	288,078	347	74,150	337	74,141	.....	.....	.....	.....	558	217,438	615	362,219
Kildonan	553	40,490	581	75,877	.....	.....	.....	.....	.....	.....	.....	.....	553	40,490	581	75,877
Ladysmith	175	80,294	214	69,592	2,175	877,846	2,158	864,180	.....	.....	.....	.....	2,350	958,140	2,372	933,772
Port Alberni	34	67,529	61	172,101	392	114,940	398	108,347	.....	.....	.....	.....	426	182,469	459	280,448
Union Bay	63	48,310	115	198,224	835	182,195	834	176,665	.....	.....	.....	.....	898	230,505	949	374,889
Nelson	.....	.....	.....	.....	2,895	1,261,475	2,854	1,120,470	.....	.....	.....	.....	2,895	1,261,475	2,854	1,120,470
New Westminster	224	604,258	220	601,008	1,729	512,753	1,807	522,921	.....	.....	.....	.....	1,953	1,117,011	2,027	1,123,929
Ladner	2	52	2	52	78	3,763	81	3,746	.....	.....	.....	.....	80	3,815	83	3,798
Steveston	25	836	20	572	425	13,860	494	15,435	.....	.....	.....	.....	450	14,696	514	16,007
White Rock	4	172	3	67	6	196	7	301	.....	.....	.....	.....	10	368	10	368
Prince Rupert	2,588	260,835	2,663	324,568	2,030	876,707	2,062	948,502	.....	.....	.....	.....	4,618	1,137,542	4,725	1,273,070
Anyox	15	22,915	62	85,255	507	274,283	461	216,383	.....	.....	.....	.....	522	297,198	523	301,638
Butedale	129	3,817	124	3,062	751	246,266	755	258,765	.....	.....	.....	.....	880	250,083	879	261,827
Ocean Falls	64	133,946	87	175,339	1,002	548,809	980	669,664	.....	.....	.....	.....	1,066	682,755	1,067	845,003
Stickeen	.....	.....	.....	.....	33	1,772	34	1,779	33	1,772	34	1,779	66	3,544	68	3,558
Stewart	84	55,717	31	10,564	201	199,087	252	239,930	.....	.....	.....	.....	285	254,804	283	250,494
Vancouver	2,600	6,050,182	2,477	6,072,945	15,548	5,846,965	15,366	5,532,649	.....	.....	.....	.....	18,148	11,897,147	17,843	11,605,594
Alert Bay	66	33,256	76	6,236	1,334	749,348	1,336	534,977	.....	.....	.....	.....	1,400	782,604	1,412	541,213
Blubber Bay	24	13,679	109	33,418	237	29,939	156	12,705	.....	.....	.....	.....	261	43,618	265	46,123
Britannia Beach	117	125,625	114	132,838	665	176,171	661	169,796	.....	.....	.....	.....	782	301,796	775	302,634
Englewood	19	71,169	20	75,727	.....	.....	.....	.....	.....	.....	.....	.....	19	71,169	20	75,727
Powell River	186	224,732	179	230,360	1,702	458,330	1,710	628,123	.....	.....	.....	.....	1,888	683,062	1,889	858,483

Victoria	2,522	3,869,201	2,377	3,578,674	4,312	2,894,376	4,517	3,237,981	.....	.....	.....	.....	6,834	6,763,577	6,894	6,816,655
Bamfield	71	4,846	75	4,746	586	141,524	584	141,554	.....	.....	.....	.....	657	146,370	659	146,300
Quatsino	46	53,952	27	46,878	137	99,766	158	106,212	.....	.....	.....	.....	183	153,718	185	153,090
Sidney	603	186,536	555	170,008	262	33,488	299	47,744	.....	.....	.....	.....	865	220,024	854	217,752
British Columbia, Total	**10,667**	**12,238,749**	**10,805**	**12,647,254**	**41,387**	**16,700,136**	**41,483**	**16,692,283**	**33**	**1,772**	**34**	**1,779**	**52,087**	**28,940,657**	**52,322**	**29,341,316**

YUKON

Dawson	.....	.....	.....	.....	59	29,476	55	29,308	13	5,943	16	5,949	72	35,419	71	35,257
Forty Mile	.....	.....	.....	.....	1	603	1	603	.....	.....	.....	.....	1	603	1	603
White Horse	.....	.....	.....	.....	131	50,823	131	50,753	1	603	1	603	132	51,426	132	51,356
Careross	.....	.....	.....	.....	90	67,140	90	67,140	.....	.....	.....	.....	90	67,140	90	67,140
Yukon, Total	.....	.....	.....	.....	**281**	**148,042**	**277**	**147,804**	**14**	**6,546**	**17**	**6,552**	**295**	**154,588**	**294**	**154,356**

RECAPITULATION—BY PROVINCES—PAR PROVINCES

Nova Scotia	**4,943**	**6,021,771**	**5,489**	**6,651,279**	**20,419**	**4,492,791**	**20,171**	**3,980,067**	.....	.....	.....	.....	**25,362**	**10,514,562**	**25,660**	**10,631,346**
Prince Edward Island	**80**	**43,887**	**135**	**87,748**	**1,614**	**317,302**	**1,567**	**274,565**	.....	.....	.....	.....	**1,694**	**361,189**	**1,702**	**362,313**
New Brunswick	**4,995**	**1,653,369**	**4,727**	**1,377,019**	**4,195**	**610,684**	**4,419**	**891,456**	.....	.....	.....	.....	**9,190**	**2,264,053**	**9,146**	**2,268,475**
Quebec	**1,845**	**7,505,267**	**1,738**	**6,179,954**	**11,300**	**11,341,292**	**11,093**	**11,943,454**	**2,304**	**1,590,125**	**2,846**	**2,151,730**	**15,449**	**20,436,684**	**15,677**	**20,275,138**
Ontario	.....	.....	.....	.....	**15,835**	**15,432,502**	**14,875**	**14,073,371**	**34,969**	**17,389,308**	**35,540**	**18,178,888**	**50,804**	**32,821,810**	**50,415**	**32,252,259**
Manitoba	**1**	**1,115**	**1**	**1,115**	**16**	**3,839**	**20**	**4,097**	.....	.....	.....	.....	**17**	**4,954**	**21**	**5,212**
British Columbia	**10,667**	**12,238,749**	**10,805**	**12,647,254**	**41,387**	**16,700,136**	**41,483**	**16,692,283**	**33**	**1,772**	**34**	**1,779**	**52,087**	**28,940,657**	**52,322**	**29,341,316**
Yukon	.....	.....	.....	.....	**281**	**148,042**	**277**	**147,804**	**14**	**6,546**	**17**	**6,552**	**295**	**154,588**	**294**	**154,356**
Grand Total	**22,531**	**27,464,158**	**22,895**	**26,944,369**	**95,047**	**49,046,588**	**93,905**	**48,007,097**	**37,320**	**18,987,751**	**38,437**	**20,338,949**	**154,898**	**95,498,497**	**155,237**	**95,290,415**

DEPARTMENT OF TRADE AND COMMERCE
OTTAWA, CANADA

MINISTER
Hon. JAMES MALCOLM

DEPUTY MINISTER
F. C. T. O'HARA

THIRTY-SEVENTH ANNUAL REPORT

OF THE

DEPARTMENT OF TRADE AND COMMERCE

FOR THE

FISCAL YEAR ENDING MARCH 31, 1929

OTTAWA
F. A. ACLAND
PRINTER TO THE KING'S MOST EXCELLENT MAJESTY
1929

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To His Excellency the Right Honourable Viscount Willingdon, G.C.S.I., G.C.M.G., G.C.I.E., G.B.E., Governor General and Commander in Chief of the Dominion of Canada.

MAY IT PLEASE YOUR EXCELLENCY:

The undersigned has the honour to present to Your Excellency the Report of the Department of Trade and Commerce for the fiscal year ended March 31, 1929.

All of which is respectfully submitted.

JAMES MALCOLM,
Minister of Trade and Commerce.

DEPARTMENT OF TRADE AND COMMERCE,
OTTAWA.

REPORT OF THE DEPUTY MINISTER

OTTAWA June 15, 1929.

The Hon. JAMES MALCOLM, M.P.,
Minister of Trade and Commerce,
Ottawa.

SIR,—I have the honour to present herewith the thirty-seventh Annual Report of the Department of Trade and Commerce, that is to say, for the fiscal year ended March 31, 1929.

CANADA'S FOREIGN TRADE, 1928-29

Canada, according to world-wide statistics, ranks high in production and international trade among the leading commercial nations of the world. In production she leads the world in output of printing paper, nickel, asbestos and cobalt; she occupies second position in the production of wheat, and third place in output of lead and gold; while in export trade she leads the world in exports of wheat, printing paper, nickel and asbestos; she occupies second place in exports of wheat flour, and in exports of wood pulp third place. During the calendar year 1928 Canada, in international trade, occupied fifth position in aggregate trade as also in import and export trade, being exceeded by the United States, the United Kingdom, Germany and France; second position in export and total trade per capita, being exceeded by New Zealand; third place in favourable trade balance, being exceeded by the United States and British India, and second place in favourable trade balance per capita, being exceeded by New Zealand.

During the fiscal year 1929 Canada's total trade amounted to $2,654,452,000, the largest twelve-months period on record. The largest previous yearly record was for the calendar year 1917 when the Dominion's total trade amounted to $2,639,726,000, the total trade for the fiscal year 1929 being $14,726,000 greater than for the calendar year 1917. Canada's imports for the fiscal year 1929, amounting to $1,265,679,000, exceeded a similar trade for any previous fiscal year, though the imports for the calendar year 1920, amounting to $1,336,921,000, were greater than for the fiscal year 1929, while exports for 1929, amounting to $1,388,773,000, were larger than for any previous fiscal year, except for the fiscal year 1918. Price fluctuations have, during the war period and post-bellum boom period, as also since then, obscured the real changes in the physical volume of trade, and consequently the growth, based on declared values as a whole during this period, has been somewhat exaggerated. Allowing for price changes, however, Canada's physical volume of imports and exports was greater for the fiscal year 1929 than for any previous year, the decrease in the value of imports compared with the calendar year 1920, and in exports compared with the fiscal year 1918, being entirely due to lower average import and export prices.

ANALYSIS OF CANADA'S TRADE

The total trade of Canada for the fiscal year ended March 31, 1929, amounted to $2,654,452,000, compared with a similar trade of $2,395,412,000 in 1928 and $2,298,466,000 in 1927; the increase for the year 1929 over 1928 amounting to $295,040,000 or 12·5 per cent, and over 1927 to $355,986,000 or 15·1 per cent. During 1929 Canada's imports were valued at $1,265,679,000 compared with a similar trade in 1928 valued at $1,108,956,000, and in 1927 at $1,030,893,000; the increase in imports in 1929 over 1928 totalling $156,723,000 or 14·1 per cent, and over 1927 $234,786,000 or 22·7 per cent. Canada's total exports (domestic

and foreign combined) were valued at $1,388,773,000 in 1929, in 1928 at $1,250,456,000, and in 1927 at $1,267,573,000, the increase over 1928 amounting to $138,317,000 or 11·1 per cent, and over 1927 to $121,200,000 or 9·6 per cent. Canada's domestic exports in 1929 amounted to $1,363,587,000, in 1928 to $1,228,208,000, and in 1927 to $1,252,158,000, the increase over 1928 amounting to $135,379,000 or 11·0 per cent, and over 1927 to $111,429,000 or 9·0 per cent.

The statistics in the following table indicate the trend of Canadian trade from 1914 to 1929, (*a*) with all countries; (*b*) with the United Kingdom; and (*c*) with the United States.

SUMMARY OF TREND OF CANADIAN TRADE, 1914 TO 1929

(Values in Millions of Dollars)

Years ended March 31	Imports into Canada				Exports from Canada			Excess of Imports (i) Exports (e)	Percentage relation of Exports to Imports
	Dutiable Goods	Free Goods	Total Imports	Per Cent Free	Canadian Produce	Foreign Produce	Total Exports		
					(*a*) With All Countries				
1914	410·3	208·9	619·2	33·7	431·6	23·8	455·4	(i) 163·8	73·5
1915	279·8	176·1	455·9	38·6	409·4	52·0	461·4	(e) 5·5	101·2
1916	289·4	218·8	508·2	43·0	741·6	37·7	779·3	(e) 271·1	153·3
1917	461·7	384·7	846·4	45·4	1,151·4	27·8	1,179·2	(e) 332·8	139·3
1918	542·3	421·2	963·5	43·7	1,540·0	46·1	1,586·1	(e) 622·6	164·6
1919	526·5	393·2	919·7	42·7	1,216·4	52·3	1,268·7	(e) 349·0	137·9
1920	693·6	370·9	1,064·5	34·8	1,239·5	47·1	1,286·6	(e) 222·1	120·9
1921	847·5	392·6	1,240·1	31·6	1,189·2	21·2	1,210·4	(i) 29·7	97·6
1922	495·6	252·2	747·8	33·7	740·2	13·7	753·9	(e) 6·1	100·8
1923	537·3	265·3	802·6	33·0	931·5	13·8	945·3	(e) 142·7	117·7
1924	591·3	302·1	893·4	33·8	1,045·4	13·4	1,058·8	(e) 165·4	118·5
1925	516·0	280·9	796·9	35·1	1,069·1	12·3	1,081·4	(e) 284·5	135·7
1926	583·0	344·3	927·3	37·1	1,315·4	13·3	1,328·7	(e) 401·4	143·1
1927	659·9	371·0	1,030·9	36·0	1,252·2	15·4	1,267·6	(e) 236·7	123·0
1928	710·0	398·9	1,108·9	36·0	1,228·2	22·2	1,250·4	(e) 141·5	112·8
1929	821·1	444·6	1,265·7	35·1	1,363·6	25·2	1,388·8	(e) 123·1	109·7
					(*b*) With the United Kingdom				
1914	102·4	29·7	132·1	22·5	215·2	7·1	222·3	(e) 90·2	167·5
1915	68·0	22·1	90·1	24·5	186·6	25·1	211·7	(e) 121·6	234·9
1916	52·0	25·4	77·4	32·8	451·9	11·2	463·1	(e) 385·7	598·3
1917	75·5	31·6	107·1	29·5	742·1	13·9	756·0	(e) 648·9	705·9
1918	58·0	23·3	81·3	28·6	845·5	15·6	861·1	(e) 779·8	1,059·1
1919	50·0	23·0	73·0	31·5	540·7	20·1	560·8	(e) 487·8	768·2
1920	93·2	33·1	126·3	26·2	489·2	6·8	496·0	(e) 369·7	392·7
1921	170·1	43·8	213·9	20·5	312·8	1·4	314·2	(e) 100·3	146·9
1922	95·1	22·0	117·1	18·8	299·4	1·0	300·4	(e) 183·3	256·5
1923	116·2	25·1	141·3	17·7	379·1	0·8	379·9	(e) 238·6	268·8
1924	126·1	27·5	153·6	17·8	360·1	1·1	361·2	(e) 207·6	235·1
1925	124·7	26·4	151·1	17·5	395·9	1·3	397·2	(e) 246·1	262·8
1926	133·1	30·6	163·7	18·6	508·2	1·1	509·3	(e) 345·6	311·1
1927	135·0	28·9	163·9	17·6	446·9	1·1	448·0	(e) 284·1	273·3
1928	150·1	35·8	185·9	19·1	410·7	2·1	412·8	(e) 226·9	222·1
1929	154·4	39·6	194·0	20·4	429·7	2·0	431·7	(e) 237·7	224·4
					(*c*) With the United States				
1914	249·5	146·8	396·3	37·0	163·4	13·6	177·0	(i) 219·3	44·6
1915	168·6	128·5	297·1	43·2	173·3	13·0	186·3	(i) 110·8	62·7
1916	199·5	171·4	370·9	46·2	201·1	15·6	216·7	(i) 154·2	58·4
1917	332·0	333·3	665·3	50·1	280·6	10·0	290·6	(i) 374·7	43·7
1918	429·3	363·6	792·9	45·8	417·2	23·6	440·8	(i) 352·1	55·6
1919	416·5	333·7	750·2	44·5	454·9	22·8	477·7	(i) 272·5	63·7
1920	499·7	301·4	801·1	37·6	464·0	37·1	501·1	(i) 300·0	62·5
1921	544·0	312·2	856·2	36·5	542·3	18·4	560·7	(i) 295·5	65·5
1922	312·1	203·9	516·0	39·5	292·5	11·5	304·1	(i) 211·9	58·9
1923	332·2	208·8	541·0	38·6	369·1	11·2	380·3	(i) 160·7	70·3
1924	355·9	245·3	601·2	40·8	430·7	10·9	441·6	(i) 159·6	73·4
1925	287·1	222·7	509·8	43·7	417·4	9·8	427·2	(i) 82·6	83·8
1926	338·0	270·7	608·6	44·5	474·9	11·0	485·9	(i) 122·7	79·7
1927	392·7	294·3	687·0	42·9	466·4	12·9	479·3	(i) 207·7	69·7
1928	416·0	303·4	719·4	42·1	478·0	18·6	496·6	(i) 222·8	69·0
1929	523·9	344·2	868·1	39·6	500·2	21·7	521·9	(i) 346·2	60·1

Canada's Trade by Countries, 1928-29

Canada's imports from foreign countries for the fiscal year 1929 amounted to $1,008,281,000, and from the British Empire to $257,398,000, the increase in 1929 over 1928 in the case of foreign countries amounting to $148,412,000, and in that of the British Empire to $8,311,000; while the exports to foreign countries were valued at $827,583,000, and to the British Empire at $536,004,000, the exports to foreign countries showing an increase of $98,641,000, and to the British Empire an increase of $36,738,000. In 1928 imports from the United States were valued at $868,056,000, and domestic exports at $500,168,000, the increase in imports being $148,620,000, and exports $22,164,000. The imports from the United Kingdom in 1928 amounted to $194,021,000, and exports to $429,730,000, the increase in imports over 1928 amounting to $8,125,000, and in exports to $19,039,000. The declared exports from Canada to the United Kingdom do not represent the true situation, as a very large quantity of the grain, especially wheat, shown in Canadian export statistics as for the United Kingdom is diverted from its original destination—the United Kingdom—to other countries. As a result of this diversion the exports to the United Kingdom would be materially reduced and the exports to other European countries increased by a corresponding amount.

Imports from Germany in 1929 were valued at $20,798,000 and exports at $46,709,000, the increase in imports from Germany over 1928 amounting to $3,742,000 and in exports to $4,465,000. The imports from Japan and the Netherlands were $12,921,000 and $9,017,000 respectively, the increase in imports being, Japan $416,000, and the Netherlands $223,000; while the exports to Japan and the Netherlands were $42,100,000 and $44,367,000 respectively, the increase in exports being, Japan $9,132,000, and the Netherlands $8,829,000.

For further information as to the trade with other principal countries, see the following table.

CANADA'S TRADE WITH PRINCIPAL COUNTRIES, 1928-29

Note:—Countries arranged in order of importance of total trade. Values in Thousands of Dollars.

Rank	Countries	Imports from 1928-29	Domestic Exports to 1928-29	Total Trade 1928-29	Increase (+) or Decrease (−) 1928-29 compared with 1927-28		
					Imports	Exports	Total
1	United States	868,056	500,168	1,368,224	(+) 148,620	(+) 22,164	(+) 170,784
2	United Kingdom	194,021	429,730	623,751	(+) 8,125	(+) 19,039	(+) 27,164
3	Germany	20,798	46,709	67,507	(+) 3,742	(+) 4,465	(+) 8,207
4	Japan	12,921	42,100	55,021	(+) 416	(+) 9,132	(+) 9,548
5	Netherlands	9,017	44,367	53,384	(+) 223	(+) 8,829	(+) 9,052
6	France	26,216	16,131	42,347	(−) 258	(+) 6,185	(+) 5,927
7	Belgium	12,014	27,301	39,315	(+) 2,116	(+) 6,519	(+) 8,635
8	New Zealand	12,771	17,358	30,129	(+) 4,509	(+) 5,991	(+) 10,500
9	Italy	4,260	23,025	27,285	(+) 18	(+) 4,283	(+) 4,301
10	China	3,095	23,687	26,782	(+) 522	(+) 10,255	(+) 10,777
11	Australia	3,485	19,470	22,955	(−) 1,817	(+) 5,281	(+) 3,464
12	British India	10,367	11,735	22,102	(+) 1,127	(+) 692	(+) 1,819
13	Argentina	7,428	14,493	21,921	(−) 2,421	(+) 3,407	(+) 986
14	Newfoundland	2,513	11,161	13,674	(+) 415	(−) 500	(−) 85
15	British South Africa	280	12,232	12,512	(−) 124	(+) 3,507	(+) 3,383
16	Greece	371	11,851	12,222	(+) 117	(+) 7,569	(+) 7,686
17	Jamaica	4,790	5,266	10,056	(−) 692	(+) 315	(−) 377
18	Cuba	4,904	4,443	9,347	(−) 683	(−) 944	(−) 1,627
19	Colombia	6,849	1,797	8,646	(−) 732	(+) 65	(−) 667
20	Norway	990	7,435	8,425	(−) 74	(+) 769	(+) 695
21	Spain	2,700	5,704	8,404	(+) 128	(+) 5,094	(+) 5,222
22	Switzerland	7,917	484	8,401	(−) 679	(−) 14	(−) 693
23	Brazil	1,726	5,873	7,599	(−) 362	(+) 976	(+) 614
24	Trinidad and Tobago	3,376	4,154	7,530	(+) 1,277	(−) 87	(+) 1,190
25	British Guiana	4,873	2,239	7,112	(−) 1,199	(−) 46	(−) 1,245
26	Sweden	2,185	4,766	6,951	(+) 323	(+) 154	(+) 477
27	Barbados	5,199	1,682	6,881	(−) 1,017	(−) 155	(−) 1,172
28	British West Indies, Other	2,078	4,656	6,734	(−) 1,475	(+) 794	(−) 681
29	Portugal	678	5,735	6,413	(−) 44	(+) 4,793	(+) 4,749
30	Denmark	153	5,981	6,134	(+) 27	(−) 410	(−) 383
31	Fiji	5,698	330	6,028	(+) 1,380	(+) 33	(+) 1,413

CANADA'S TRADE WITH PRINCIPAL COUNTRIES, 1928-29—*Concluded*

NOTE:—Countries arranged in order of importance of total trade. Values in Thousands of Dollars

Rank	Countries	Imports from 1928-29	Domestic Exports to 1928-29	Total Trade 1928-29	Increase (+) or Decrease (−) 1928-29 compared with 1927-28		
					Imports	Exports	Total
32	Peru	4,448	1,311	5,759	(−) 768	(+) 25	(−) 743
33	Czecho-Slovakia	3,298	1,704	5,002	(+) 874	(+) 265	(+) 1,139
34	Dutch East Indies	705	3,605	4,310	(−) 426	(+) 1,240	(+) 814
35	Hong Kong	1,403	2,837	4,240	(−) 38	(+) 371	(+) 333
36	Irish Free State	59	4,145	4,204	(+) 29	(−) 180	(−) 151
37	Mexico	1,170	2,676	3,846	(−) 4	(+) 136	(+) 132
38	British Straits Settlements	2,015	1,204	3,219	(−) 444	(−) 337	(−) 781
39	Ceylon	2,529	662	3,191	(−) 203	(−) 65	(−) 268
40	Egypt	194	2,846	3,040	(+) 35	(+) 1,048	(+) 1,083
	Total above 40 countries	1,257,550	1,333,053	2,590,603	(+)160,563	(+)130,658	(+) 291,221
	Total, All Countries	1,265,679	1,363,587	2,629,266	(+)156,723	(+)135,379	(+) 292,102
	British Empire	257,398	536,004	793,402	(+) 8,311	(+) 36,738	(+) 45,049
	Foreign Countries	1,008,281	827,583	1,835,864	(+)148,412	(+) 98,641	(+) 247,053

ANALYSIS OF CANADA'S COMMODITY IMPORTS, 1928-29

The increase in the imports in 1929 over 1928, amounting to $156,723,000, occurred in eight of the main groups, one group only showing a decrease. The increase in the eight main groups that had increases amounted to $161,778,000, while the decrease in the only group that had a decrease totalled $5,055,000. The imports under the main groups arranged in order of importance of increases or decreases, 1929 compared with 1928, were: Iron and Its Products, $346,611,000, increase, $87,037,000; Fibres, Textiles and Textile Products, $206,444,000, increase, $19,448,000; Non-Ferrous Metal Products, $75,438,000, increase, $15,248,000; Non-Metallic Mineral Products, $166,964,000, increase, $13,915,000; Miscellaneous Commodities, $68,492,000, increase, $8,643,000; Wood, Wood Products and Paper, $59,215,000, increase, $7,464,000; Animals and Animal Products, $71,662,000, increase, $5,872,000; Chemicals and Allied Products, $37,723,000, increase, $4,151,000; and Agricultural and Vegetable Products, $233,130,000, decrease, $5,055,000.

Imports under the Agricultural and Vegetable Products group amounted to $233,130,000, decrease 1929 compared with 1928, amounting to $5,055,000. (The principal imports under this group, with increase or decrease, were: alcoholic beverages, $48,844,000, increase, $2,944,000; sugar for refining, $26,405,000, decrease, $6,862,000; fresh fruits, $25,916,000, increase, $1,056,000; crude rubber, $17,410,000, decrease, $3,974,000; corn, $13,792,000, increase, $734,000; tea, $11,753,000, decrease, $558,000; vegetable oil, $10,809,000, decrease, $892,000; fresh vegetables, $6,938,000, increase, $869,000; raw tobacco, $6,766,000, decrease, $253,000; dried fruits, $5,999,000, decrease, $312,000.) The imports under the Animals and Animal Products group amounted to $71,662,000, increase 1929 compared with 1928 being $5,872,000. (Under this group the principal imports, with increase or decrease, were: furs, $17,166,000, increase, $512,000; raw hides, $12,429,000, decrease, $1,711,000; butter, $9,029,000, increase, $3,496,000; unmanufactured leather, $6,009,000, increase, $49,000; meats, $5,905,000, increase, $1,319,000; manufactured leather, $4,989,000; increase, $431,000; fish, $3,452,000, increase, $356,000.) The value of the imports under the main group Fibres, Textiles and Textile Products totalled $206,444,000, increase 1929 compared with 1928 being $19,448,000. (The principal imports under this group, with increase or decrease, compared with 1928 were: woollen

goods, $33,779,000, increase, $2,367,000; cotton goods, $30,898,000, increase, $126,000; raw cotton, $28,204,000, increase, $3,577,000; silk fabrics and velvets, $16,616,000, decrease, $3,247,000; flax, hemp and jute, $15,854,000, increase, $721,000; raw silk, $6,533,000, increase, $1,460,000; noils and tops (wool), $5,823,000, increase, $692,000; raw wool, $5,790,000, increase, $662,000; manila and sisal grass, $5,766,000, increase, $1,511,000; woollen yarn $5,733,000, increase, $1,377,000; cotton yarn, $4,192,000, increase, $1,311,000.) The imports under the Wood, Wood Products and Paper group amounted to $59,215,000, increase compared with 1928, $7,464,000. (The principal imports under this group, with increase or decrease, compared with 1928 were: unmanufactured wood, $16,639,000, increase, $2,370,000; books and printed matter, $16,540,000, increase, $1,707,000; paper, $13,649,000, increase, $1,731,000; manufactured wood, $12,386,000, increase, $1,656,000.) During 1929 the imports under Iron and Its Products amounted to $346,611,000, increase compared with 1928, $87,037,000. (The principal imports under this group, with increase or decrease, 1929 compared with 1928, were: machinery, $60,263,000, increase, $21,662,000; rolling mill products, $60,084,000, increase, $16,017,000; automobile parts, $55,761,000, increase, $22,524,000; automobiles, $42,969,000, increase, $8,547,000; farm implements, $40,293,000, increase, $10,656,000; engines and boilers, $19,307,000, increase, $2,300,000; hardware and cutlery, $4,775,000, increase, $677,000; tubes and pipe, $4,697,000, increase, $959,000; iron ore $4,391,000, increase, $1,502,000; wire, $3,806,000, increase, $488,000.)

Under the Non-Ferrous Metal Products group the imports in 1929 were valued at $75,438,000, increase $15,248,000. (The principal imports under this group, with increase or decrease, compared with 1928 were: electric apparatus, $26,775,000, increase, $7,731,000; copper, $13,068,000, increase, $5,818,000; brass, $6,754,000, increase, $1,601,000; aluminium, $6,372,000, decrease, $1,819,000.) The imports under the Non-Metallic Mineral Products group were valued at $166,964,000, increase $13,915,000. (The principal imports under this group, with increase or decrease, 1929 compared with 1928 were: coal (except for ships' stores), $54,483,000, decrease, $3,786,000; crude petroleum, $37,660,000, increase, $3,535,000; refined petroleum. $23.672,000, increase, $7,715,000; clay and products, $10,417,000, increase, $755,000; glass and glassware, $9,718,000, increase, $1,588,000; stone and products, $8,538,000, increase, $2,142,000; coke, $6,648,000, increase, $1,838,000.) The imports under the Chemicals and Allied Products group amounted to $37,723,000 in 1929, increase over 1928 being $4,151,000. (The chief imports under this group, with increase or decrease, 1929 compared with 1928 were: paints and varnishes, $5,855,000, increase, $840,000; fertilizers, $4,847,000, increase, $702,000; dyeing and tanning materials, $3,982,000, increase, $41,000; drugs and medicines, $3,727,000, increase, $691,000, sodium compounds, $3,666,000, increase, $484,000.) Under the Miscellaneous Commodities group the imports in 1929 totalled $68,492,000, increase 1929 compared with 1928 being $8,643,000. (The principal imports, with increase or decrease, 1929 compared with 1928 were: settlers' effects, $10,391,000, increase, $1,199,000; containers (usual outside coverings), $5,480,000, increase, $1,392,000; scientific equipment, $4,458,000, increase, $311,000; post office parcels, $3,638,000, increase, $228,000; articles for exhibition, $3,295,000, increase, $468,000; articles returned within five years, $3,214,000, decrease, $558,000; musical instruments, $2,826,000, increase, $449,000; jewellery, $2,605,000, increase, $748,000; toys, $2,251,000, increase, $412,000.

For further information respecting Canada's imports in principal commodities, with proportions received from the United Kingdom and the United States, see the following table:—

CANADA'S IMPORTS BY MAIN GROUPS, 1928-29

NOTE:—Values in Thousands of Dollars.

Main Groups	Total Imports 1928-29	Imports from		Increase (+) or Decrease (−) 1928-29 compared with 1927-28		
		Kingdom United	United States	Total	United Kingdom	United States
Agricultural and Vegetable Products	233,130	53,671	103,690	(−) 5,055	(+) 2,537	(+) 1,481
Animals and Animal Products	71,662	5,664	42,654	(+) 5,872	(+) 426	(+) 2,071
Fibres, Textiles and Textile Products	206,444	77,021	81,890	(+) 19,448	(+) 5,557	(+) 12,459
Wood, Wood Products and Paper	59,215	4,935	50,564	(+) 7,464	(+) 575	(+) 6,572
Iron and Its Products	346,611	18,997	317,089	(+) 87,037	(+) 1,271	(+) 83,098
Non-Ferrous Metal Products	75,438	6,654	62,105	(+) 15,248	(+) 859	(+) 13,719
Non-Metallic Mineral Products	166,964	12,101	135,154	(+) 13,915	(−) 2,367	(+) 17,706
Chemicals and Allied Products	37,723	4,943	26,225	(+) 4,151	(+) 521	(+) 3,979
Miscellaneous Commodities	68,492	10,035	48,685	(+) 8,643	(−) 401	(+) 7,535
Total Imports	1,265,679	194,021	868,056	(+)156,723	(+) 8,125	(+) 148,621
Dutiable goods	821,075	154,457	523,869	(+) 111,025	(+) 4,403	(+) 107,822
Free goods	444,604	39,564	344,187	(+) 45,698	(+) 3,722	(+) 40,799
Duty collected on Imports	200,479	40,860	122,782	(+) 28,606	(+) 2,482	(+) 25,658

ONE HUNDRED COMMODITIES IMPORTED INTO CANADA, 1928-29

NOTE:—Commodities arranged in order of importance. Values in Thousands of Dollars.

Rank	Commodity	Total Imports 1928-29	Imports from		Increase (+) or Decrease (−) 1928-29 compared with 1927-28		
			United Kingdom	United States	Total	United Kingdom	United States
1	Machinery	60,262	3,997	54,614	(+) 11,662	(−) 1,107	(+) 12,271
2	Automobile parts	55,761	41	55,467	(+) 22,524	(−) 51	(+) 22,363
3	Coal	55,661	4,159	51,412	(−) 3,695	(−) 2,529	(−) 1,129
4	Spirits and wines	48,349	39,909	6	(+) 2,877	(+) 1,539	(−) 1
5	Automobiles	42,969	338	42,619	(+) 8,547	(−) 61	(+) 8,602
6	Farm Implements	40,293	142	39,826	(+) 10,656	(−) 56	(+) 10,693
7	Crude petroleum	38,645	5	26,964	(+) 2,790	(−) 17	(+) 4,443
8	Plates and sheets (iron)	30,666	5,285	24,681	(+) 8,266	(+) 1,457	(+) 6,505
9	Raw cotton	28,204	3	28,170	(+) 3,577	(−) 8	(+) 3,553
10	Electric apparatus	26,775	1,927	24,411	(+) 7,731	(+) 187	(+) 7,649
11	Sugar for refining	26,405	.....	399	(−) 6,862	-	(+) 15
12	Green fruits	25,916	84	24,708	(+) 1,056	(−) 19	(+) 913
13	Engines and boilers	19,307	1,119	18,033	(+) 2,300	(+) 154	(+) 2,105
14	Gasoline	18,038	-	18,034	(+) 6,489	-	(+) 6,489
15	Raw rubber	17,410	76	16,449	(−) 3,974	(+) 16	(−) 2,885
16	Raw and dressed furs	16,906	1,075	13,053	(+) 410	(−) 120	(+) 845
17	Silk fabrics and velvets	16,613	700	2,669	(−) 3,247	(−) 768	(+) 322
18	Books and printed matter	16,540	2,449	13,382	(+) 1,708	(+) 267	(+) 1,427
19	Corn	13,792	-	9,346	(+) 734	-	(+) 2,574
20	Worsteds and serges	13,728	11,235	60	(+) 290	(+) 307	(−) 11
21	Paper	13,650	1,456	10,678	(+) 1,731	(+) 1,068	(+) 1,510
22	Copper and products	13,068	298	12,716	(+) 5,818	(+) 147	(+) 5,654
23	Raw hides	12,429	116	9,286	(−) 1,711	(−) 12	(−) 899
24	Wood manufactures	12,386	933	10,258	(+) 1,656	(+) 241	(+) 1,297
25	Planks and boards	12,324	13	12,238	(+) 1,819	(−) 10	(+) 1,831
26	Structural iron and steel	11,828	265	10,819	(+) 3,172	(+) 128	(+) 2,626
27	Tea	11,753	5,283	25	(−) 558	(+) 3	(−) 6
28	Bars and rails (iron)	11,278	1,022	9,400	(+) 4,080	(+) 147	(+) 3,754
29	Vegetable oil	10,809	1,456	7,287	(−) 892	(+) 1,068	(−) 2,535
30	Clay and products	10,417	3,958	4,479	(+) 755	(+) 49	(+) 648
31	Settlers' effects	10,391	760	9,343	(+) 1,199	(−) 419	(+) 1,606
32	Coloured or printed cottons	10,289	5,071	4,320	(+) 39	(−) 25	(+) 240
33	Glass and glassware	9,717	1,225	4,861	(+) 1,588	(−) 105	(+) 791
34	Stone and products	8,538	606	7,307	(+) 2,142	(+) 84	(+) 1,929
35	Jute cloth or canvas	8,167	2,154	394	(+) 304	(+) 97	(−) 591
36	Fresh vegetables	6,928	81	5,918	(+) 869	(+) 9	(+) 488
37	Castings and forgings (iron)	6,868	457	6,402	(+) 2,571	(−) 140	(+) 2,708
38	Grey and white cottons	6,806	1,898	4,832	(+) 2,624	(+) 340	(+) 2,291
39	Raw tobacco	6,766	56	5,619	(−) 253	(+) 26	(+) 24

ONE HUNDRED COMMODITIES IMPORTED INTO CANADA, 1928-29—*Concluded*

NOTE:—Commodities arranged in order of importance. Values in Thousands of Dollars

Rank	Commodity	Total Imports 1928-29	Imports from		Increase (+) or Decrease (−) 1928-29 compared with 1927-28		
			United Kingdom	United States	Total	United Kingdom	United States
40	Brass and products	6,754	648	5,699	(+) 1,601	(+) 121	(+) 1,435
41	Coke	6,648	159	6,448	(+) 1,838	(+) 52	(+) 1,854
42	Raw silk	6,533	2	4,514	(+) 1,460	-	(+) 658
43	Leather, unmanufactured	6,009	1,281	4,638	(+) 49	(−) 220	(+) 240
44	Dried fruits	5,999	330	4,147	(−) 312	(−) 78	(−) 309
45	Meats	5,905	278	4,283	(+) 1,319	(−) 32	(+) 674
46	Green coffee	5,856	830	11	(+) 189	(+) 203	(−) 5
47	Paints and varnishes	5,855	895	4,136	(+) 840	(+) 124	(+) 808
48	Noils, tops and waste wool	5,823	5,181	185	(+) 692	(+) 801	(−) 138
49	Raw wool	5,790	2,670	1,503	(+) 662	(−) 179	(+) 617
50	Sisal and manila grass	5,766	38	5,453	(+) 1,511	(−) 11	(+) 1,624
51	Woollen yarn	5,733	5,566	4	(+) 1,377	(+) 1,456	(−) 27
52	Rubber manufactures	5,676	618	4,884	(+) 397	(−) 41	(+) 442
53	Containers (outside coverings)	5,480	2,151	2,045	(+) 1,392	(+) 505	(+) 665
54	Woollen clothing	5,194	4,314	611	(−) 1,163	(−) 971	(+) 20
55	Silk clothing	5,036	476	3,012	(+) 1,037	(+) 30	(+) 1,075
56	Leather manufactures	4,989	1,283	2,598	(+) 431	(−) 53	(+) 152
57	Fertilizers	4,847	12	3,659	(+) 702	(−) 14	(+) 738
58	Nuts (except coconuts)	4,811	186	1,597	(+) 134	(+) 66	(+) 48
59	Hardware and cutlery	4,775	1,133	2,869	(+) 677	(+) 131	(+) 530
60	Tubes and pipe (iron)	4,697	535	3,884	(+) 959	(+) 108	(+) 832
61	Band and hoop iron	4,677	151	4,339	(+) 63	(−) 322	(+) 461
62	Scientific and educational equipment	4,458	339	3,638	(+) 311	(+) 70	(+) 172
63	Iron ore	4,391	-	3,425	(+) 1,502	-	(+) 1,198
64	Cotton yarn	4,192	1,511	2,628	(+) 1,311	(+) 721	(+) 544
65	Tweeds	4,126	3,635	32	(+) 354	(+) 349	(+) 7
66	Dyeing and tanning materials	3,982	153	2,963	(+) 41	(+) 15	(+) 408
67	Wire of iron or steel	3,806	1,488	1,997	(+) 488	(+) 318	(+) 172
68	Alumina and bauxite	3,806	-	3,626	(−) 2,475	-	(−) 2,613
69	Cocoa and chocolate	3,803	377	1,020	(−) 986	(−) 343	(+) 63
70	Medicinal preparations	3,727	1,044	1,947	(+) 691	(+) 135	(+) 500
71	Soda and soda compounds	3,666	534	2,839	(+) 484	(−) 193	(+) 598
72	Post office parcels	3,638	485	3,153	(+) 228	(−) 1	(+) 230
73	Clocks and watches	3,577	70	1,333	(+) 273	(−) 5	(+) 114
74	Fish	3,452	243	1,216	(+) 356	(+) 23	(+) 248
75	Canned fruits	3,308	147	2,086	(+) 599	(−) 46	(+) 478
76	Carpets (wool)	3,304	1,421	315	(+) 498	(+) 95	(+) 127
77	Hats and caps	3,230	1,247	1,091	(+) 15	(−) 192	(+) 144
78	Goods returned within five years	3,214	243	2,581	(−) 558	(−) 229	(−) 421
79	Tools	3,195	313	2,427	(+) 644	(+) 40	(+) 562
80	Diamonds, unset	3,182	1,086	60	(+) 114	(+) 99	(+) 42
81	Pigs and ingots (iron)	3,143	296	2,264	(+) 1,091	(−) 68	(+) 900
82	Animals, living	3,104	295	2,800	(+) 598	(+) 59	(+) 572
83	Tin in blocks	2,988	1,113	1,308	(+) 1	(+) 165	(−) 455
84	Sulphur	2,939	-	2,938	(+) 31	-	(+) 35
85	Binder twine	2,913	325	1,566	(+) 618	(+) 269	(+) 700
86	Musical instruments	2,826	92	2,273	(+) 449	(+) 3	(+) 376
87	Toys and dolls	2,607	301	1,096	(+) 488	(+) 62	(+) 258
88	Jewellery	2,605	191	1,408	(+) 748	(+) 60	(+) 263
89	Cotton clothing	2,355	520	1,393	(+) 80	(+) 99	(−) 73
90	Molasses	2,328	49	558	(−) 414	(+) 1	(+) 213
91	Seeds	2,243	360	1,011	(−) 38	(+) 96	(−) 68
92	Silk yarn, artificial	2,154	54	87	(+) 370	(−) 10	(−) 307
93	Rice	1,891	44	584	(−) 467	(+) 34	(+) 22
94	Dress goods (wool) to be dyed	1,851	1,160	-	(+) 284	(+) 292	-
95	Refined sugar	1,778	1	227	(+) 324	(−) 10	(+) 57
96	Canned vegetables	1,753	-	1,170	(+) 312	(−) 4	(+) 330
97	Rods of iron and steel	1,634	14	572	(+) 437	(−) 2	(+) 239
98	Cotton lace and embroidery	1,473	1,227	261	(−) 800	(−) 328	(−) 121
99	Soap	1,162	165	866	(−) 16	(+) 17	(−) 27
100	Zinc	1,067	14	687	(+) 200	(−) 9	(−) 1
	Total value of above commodities	1,044,391	148,947	732,450	(+) 124,833	(+) 5,145	(+) 127,989
	Total value of imports	1,265,679	194,021	868,056	(+) 156,723	(+) 8,125	(+) 148,621
	Percentage represented by above commodities	82·5	76·8	84·3	-	-	-

CANADA'S IMPORTS FOR CANADIAN INDUSTRIES, 1928-29

From the statistics in the following table giving "Imports of Sixty-two Leading Commodities for Canadian Industries, 1928-29," it will be noted that the total value for these commodities amounted to $391,831,000, the United Kingdom supplying $27,690,000 of this amount and the United States $289,-355,000. The increase from all countries, 1929 compared with 1928, amounted

to $33,697,000; from the United Kingdom to $3,414,000, and from the United States to $36,460,000. According to degree of manufacture, raw materials accounted for $185,086,000 of the total value of commodities listed for Canadian industries; semi-manufactured products for $82,251,000; and fully or chiefly manufactured products for $124,494,000. The proportion of the commodities imported from the United Kingdom and the United States, according to degree of manufacture, with increase or decrease, 1929 compared with 1928 was: raw materials, United Kingdom, $5,364,000, decrease, $464,000; United States $149,531,000, increase, $6,235,000; semi-manufactured products, United Kingdom, $9,009,000, increase, $1,412,000, United States, $41,729,000, increase, $2,112,000; and fully or chiefly manufactured products, United Kingdom, $13,317,000, increase, $2,466,000, United States, $98,095,000, increase, $28,113,000.

For further information respecting imports of commodities for Canadian industries, with proportions received from the United Kingdom and the United States, see the following table:—

IMPORTS OF SIXTY-TWO LEADING COMMODITIES FOR CANADIAN INDUSTRIES, 1928-29

NOTE:—Commodities arranged in order of importance. Values in Thousands of Dollars.

Rank	Commodity	Total Imports 1928-29	Imports from		Increase (+) or Decrease (−) 1928-29 compared with 1927-28		
			United Kingdom	United States	Total	United Kingdom	United States
1	Automobile parts	55,761	41	55,467	(+) 22,524	(−) 51	(+) 22,363
2	Crude petroleum (except for ships' stores)	37,660	5	26,964	(+) 3,535	(−) 16	(+) 4,444
3	Raw cotton	28,204	3	28,170	(+) 3,577	(−) 8	(+) 3,553
4	Sugar for refining	26,405	–	399	(−) 6,862	–	(+) 15
5	Bituminous coal	25,904	473	25,430	(−) 492	(−) 22	(−) 475
6	Raw rubber	17,410	76	16,449	(−) 3,974	(+) 16	(−) 2,885
7	Raw furs	14,070	874	11,863	(+) 780	(−) 43	(+) 766
8	Raw hides	12,429	116	9,286	(−) 1,711	(−) 12	(−) 899
9	Lumber, rough sawn	12,324	13	12,238	(+) 1,819	(−) 10	(+) 1,831
10	Automobile engines	11,728	–	11,728	(−) 230	–	(−) 230
11	Tin plate	8,009	2,415	5,593	(+) 1,041	(+) 75	(+) 966
12	Copper bars and rods	7,040	1	7,023	(+) 3,015	(−) 6	(+) 3,018
13	Raw tobacco	6,766	56	5,619	(−) 252	(+) 26	(+) 24
14	Raw silk	6,533	2	4,514	(+) 1,460	–	(+) 658
15	Leather, unmanufactured	6,009	1,281	4,638	(+) 49	(−) 220	(+) 240
16	Raw coffee	5,856	830	11	(+) 189	(+) 203	(−) 5
17	Skelp iron for pipe	5,827	497	5,196	(+) 1,329	(+) 200	(+) 1,028
18	Wool tops	5,823	5,181	185	(+) 692	(+) 801	(−) 138
19	Raw wool	5,790	2,670	1,503	(+) 662	(−) 179	(+) 617
20	Manila and sisal grass	5,766	38	5,453	(+) 1,511	(−) 11	(+) 1,624
21	Woollen yarn	5,733	5,566	4	(+) 1,377	(+) 1,456	(−) 27
22	Iron ore	4,391	–	3,425	(+) 1,502	–	(+) 1,198
23	Iron and steel articles for agricultural implements	4,322	62	4,224	(+) 1,541	(+) 43	(+) 1,492
24	Cotton yarn	4,192	1,511	2,628	(+) 1,311	(+) 721	(+) 544
25	Alumina, bauxite and cryolite	4,104	–	3,702	(−) 2,230	–	(−) 2,586
26	Dyeing and tanning materials	3,982	153	2,963	(+) 41	(+) 15	(+) 408
27	Silk cloth to be dyed	3,965	4	46	(+) 34	(−) 6	(+) 44
28	Gums and resins	3,349	36	2,957	(+) 222	(+) 7	(+) 49
29	Rolled iron or steel for agricultural implements	3,212	12	3,198	(+) 1,325	(+) 4	(+) 1,325
30	Diamonds, unset	3,182	1,086	60	(+) 114	(+) 99	(+) 42
31	Pigs, ingots and blooms (iron)	3,143	296	2,264	(+) 1,091	(−) 68	(+) 900
32	Tin in blocks	2,987	1,113	1,308	(+) 1	(+) 165	(−) 455
33	Sulphur	2,939	–	2,938	(+) 31	–	(+) 35
34	Diamond dust or bort, and black diamonds for borers	2,615	155	2,434	(+) 1,126	(+) 88	(+) 1,049
35	Crude cotton seed oil	2,394	346	2,044	(−) 2,850	(+) 342	(−) 3,161
36	Oil for soap industry	2,385	42	2,295	(−) 141	(+) 9	(−) 885
37	Sausage casings	2,164	–	223	(+) 43	(−) 29	(+) 19
38	Artificial silk yarn and tops	2,154	54	87	(+) 370	(−) 10	(−) 307
39	Raw cocoa	1,942	191	421	(−) 745	(−) 412	(+) 70
40	Furs, wholly or partially dressed	1,862	122	992	(−) 428	(−) 84	(+) 42
41	Dress goods (wool) to be dyed	1,851	1,160	–	(+) 284	(+) 292	–
42	Rubber, hard, recovered, etc	1,768	11	1,752	(+) 173	(−) 6	(+) 212
43	Crude peanut oil	1,740	424	421	(+) 1,262	(+) 424	(+) 187
44	Celluloid in lumps	1,732	64	1,460	(+) 72	(+) 5	(+) 88
45	Hatters' materials	1,640	52	702	(+) 136	(−) 18	(+) 37
46	Wire rods for making wire	1,623	14	561	(+) 441	(−) 2	(+) 244
47	Axles for vehicles	1,550	8	1,542	(−) 279	(+) 2	(−) 281
48	Grease for soap and leather	1,130	4	1,039	(−) 103	(−) 5	(−) 85
49	Oxide of manganese	1,054	–	56	(−) 402	–	(−) 33
50	Veneers of Wood	997	3	994	(+) 213	(+) 1	(+) 199

IMPORTS OF SIXTY-TWO LEADING COMMODITIES FOR CANADIAN INDUSTRIES, 1928-29—*Concluded*

NOTE:—Commonities arranged in order of importance; Value in Thousanns of Dollars.

Rank	Commodity	Total Imports 1928-29	Imports from		Increase (+) or Decrease (−) 1928-29 compared with 1927-28		
			United Kingdom	United States	Total	United Kingdom	United States
51	Locomotive tires in the rough	940	416	525	(−) 60	(−) 123	(+) 65
52	Zinc in sheets and plates	731	5	366	(+) 259	(−) 17	(+) 69
53	Ores of metals, n.o.p	656	17	635	(−) 131	(+) 11	(−) 144
54	Logs (wood)	629	-	622	(+) 36	(−) 5	(+) 109
55	Boiler plate	601	3	595	(+) 213	(+) 3	(+) 221
56	Sulphate of alumina	522	19	489	(+) 36	(+) 9	(+) 24
57	Sulphate of soda	420	99	310	(−) 270	(−) 207	(−) 69
58	Glycerine for explosives	492	58	70	(+) 181	(−) 25	(+) 43
59	Broom corn	428	-	425	(+) 50	-	(+) 47
60	Bristles	390	12	335	(+) 19	(−) 8	(+) 43
61	Sand, silica for industries	372	-	308	(+) 42	-	(+) 42
62	Hemp	234	-	206	(−) 872	-	(−) 867
	Total above commodities	391,831	27,690	289,355	(+) 33,697	(+) 3,414	(+) 36,460
	RECAPITULATION						
	Imports according to degree of manufacture—						
	Raw materials	185,086	5,364	149,531	(+) 3,699	(−) 464	(+) 6,235
	Semi-manufactured	82,251	9,009	41,729	(−) 1,821	(+) 1,412	(+) 2,112
	Fully or chiefly manufactured	124,494	13,317	98,095	(+) 31,819	(+) 2,466	(+) 28,113

ANALYSIS OF CANADA'S COMMODITY EXPORTS, 1928-29

During the fiscal year 1929 Canada's domestic exports compared with 1928 show increases in seven of the main groups and decreases in two. The total increase under the main groups that had increases amounted to $143,693,000, while the total decrease for the two main groups that had decreases amounted to $8,314,000; thus the net increase was $135,379,000. The total exports under each main group arranged in order of importance of increase or decrease, 1929 compared with 1928, were: Agricultural and Vegetable Products, $646,514,000, increase, $91,403,000; Non-Ferrous Metal Products, $112,655,000, increase, $21,815,000; Iron and Its Products, $82,257,000, increase, $19,503,000; Wood, Wood Products and Paper, $288,622,000, increase, $4,078,000; Miscellaneous Commodities, $18,264,000, increase, $3,227,000; Chemicals and Allied Products, $19,438,000, increase, $2,073,000; Non-Metallic Mineral Products, $27,402,000; increase, $1,594,000; Fibres, Textiles and Textile Products, $9,678,000, decrease, $1,226,000; and Animals and Animal Products, $158,757,000, decrease, $7,088,000.

The domestic exports from Canada under the main group of Agricultural and Vegetable Products amounted to $646,514,000, increase 1929 over 1928, $91,403,000. (The principal exports under this group, with increase or decrease, 1929 compared with 1928, were: wheat, $428,524,000, increase, $76,407,000; wheat flour, $65,118,000, increase, $5,238,000; barley, $25,744,000, increase, $2,271,000; whiskey, $24,123,000, increase, $2,638,000; rubber tires, $19,120,000, decrease, $1,154,000; rye, $10,809,000, increase, $160,000; oats, $10,242,000, increase, $5,967,000; rubber footwear, $8,590,000, increase, $2,242,000; seeds, $7,945,000, increase, $749,000; ale and beer, $5,608,000, increase, $207,000; bran and shorts, $5,496,000, increase, $2,746,000; apples, fresh, $4,867,000, increase, $623,000; potatoes, $3,083,000, decrease, $4,255,000.) During 1929 the exports under the Animals and Animal Products group amounted to $158,757,000, decrease, 1929 compared with 1928, $7,088,000. (The principal exports under this group, with increase or decrease, 1929 compared with 1928, were: fish, $34,982,000, increase, $1,463,000; cheese, $25,182,000, increase, $4,081,000; raw furs, $24,250,000, increase, $227,000; meats, $19,185,000, decrease, $5,288,000;

animals, living, $17,034,000, decrease, $1,886,000; unmanufactured leather, $9,592,000, decrease, $1,594,000; raw hides, $9,480,000, decrease, $2,235,000; milk and cream, $6,061,000, decrease, $1,781,000.) The exports under the Fibres, Textiles and Textile Products group in 1929 were valued at $9,678,000; decrease, compared with 1928 amounted to $1,226,000. (Under this group the principal exports, with increase or decrease, 1929 compared with 1928, were: raw wool, $2,797,000, decrease, $353,000; rags, $1,801,000, increase $35,000; binder twine, $1,317,000, decrease, $736,000; cotton, $702,000, decrease, $307,000; felt manufactures, $561,000, increase, $74,000.) The value of the exports under the Wood, Wood Products and Paper group, 1929, was $288,622,000, increase compared with 1928 being $4,078,000. (Under this group the principal exports, with increase or decrease, compared with 1928 were: newsprint paper, $142,343,000, increase, $13,836,000; planks and boards, $47,664,000, decrease, $7,734,000; wood pulp, $44,896,000, decrease, $2,366,000; pulp wood, $14,187,000, decrease, $996,000; shingles (wood), $7,793,000, increase, $973,000; laths (wood), $6,024,000, decrease, $475,000; logs, $4,649,000, decrease, $336,000.) The exports under the Iron and Its Products group amounted to $82,257,000, increase, 1929 compared with 1928, $19,503,000. (The principal exports under this group, with increase or decrease, 1929 compared with 1928 were: automobiles, $43,060,000, increase, $18,219,000; farm implements, $15,871,000, increase, $228,000; machinery, $7,337,000, increase, $1,171,000; pigs and ingots, $3,884,000, increase, $1,102,000; automobile parts, $2,383,000, decrease, $184,000.) The exports under the group Non-Ferrous Metal Products amounted to $112,655,000, increase, 1929 compared with 1928, $21,815,000. (The principal exports under this group, with increase or decrease, 1929 compared with 1928 were: nickel, $23,880,000, increase, $6,854,000; copper blister, $18,968,000, increase, $11,540,000; raw gold, $12,396,000, increase, $3,361,000; silver $11,840,000, decrease, $22,000; lead, $11,130,000, decrease, $750,000; aluminium, $9,644,000, decrease, $1,852,000; zinc, $8,307,000, increase, $188,000; copper ore, $7,936,000, increase, $852,000.) The exports under the Non-Metallic Mineral Products group in 1929 amounted to $27,402,000, increase over 1928, $1,594,000. (The principal exports under this group, with increase or decrease, compared with 1928 were: asbestos, raw, $11,267,000, increase, $590,000; stone and products, $6,539,000, increase, $1,045,000; coal, $4,524,000, decrease, $222,000; crude petroleum oil, $1,309,000, increase, $495,000.) The exports under the Chemicals and Allied Products group amounted to $19,438,000, increase over 1928, $2,073,000. (Under this group the principal exports, with increase or decrease, compared with 1928 were: fertilizers, $6,078,000, increase, $664,000; acids, $4,241,000, increase, $911,000; soda and soda compounds, $3,920,000, increase, $253,000; drugs and medicines, $661,000, increase, $211,000; paints and varnishes, $529,000, increase, $109,000.) Under the Miscellaneous Commodities group the exports in 1929 amounted to $18,264,000, increase compared with 1928 amounted to $3,227,000. (The principal exports under this group, with increase or decrease compared with 1928 were: settlers' effects, $5,918,000, increase, $120,000; films, $4,265,000, increase, $723,000; electrical energy, $3,938,000. (As electrical energy appears as an item in Canadian export statistics for the first time from April 1, 1928, there was practically no increase or decrease); musical instruments, $768,000, decrease, $504,000; containers (usual outside coverings), $572,000, decrease, $143,000.

For further information respecting Canada's exports in principal commodities, with proportions sent to the United Kingdom and the United States, see the following table:—

CANADA'S DOMESTIC EXPORTS BY MAIN GROUPS, 1928-29

NOTE:—Values in Thousands of Dollars.

Main Groups	Total Domestic Exports 1928-29	Exports to		Increase (+) or Decrease (−) 1928-29 compared with 1927-28		
		United Kingdom	United States	Total	United Kingdom	United States
Agricultural and Vegetable Products	646,514	325,106	58,527	(+) 91,403	(+) 14,895	(+) 2,428
Animals and Animal Products	158,757	47,645	84,994	(−) 7,088	(−) 1,038	(−) 7,250
Fibres, Textiles and Textile Products	9,678	811	4,930	(−) 1,226	(−) 1,086	(+) 8
Wood, Wood Products and Paper	288,622	22,351	235,665	(+) 4,078	(+) 5,180	(−) 3,321
Iron and Its Products	82,257	8,721	11,157	(+) 19,503	(+) 525	(+) 2,326
Non-Ferrous Metal Products	112,655	16,347	63,777	(+) 21,815	(+) 651	(+) 19,663
Non-Metallic Mineral Products	27,402	1,771	17,995	(+) 1,594	(−) 163	(+) 1,957
Chemicals and Allied Products	19,438	4,037	10,779	(+) 2,073	(−) 197	(+) 2,628
Miscellaneous Commodities	18,264	2,942	12,343	(+) 3,227	(+) 273	(+) 3,724
Total Exports (domestic)	1,363,587	429,731	500,167	(+) 135,379	(+) 19,040	(+) 22,163
Foreign Exports	25,186	1,938	21,647	(+) 2,937	(−) 134	(+) 3,006
Total Exports	1,388,773	431,669	521,814	(+) 138,316	(+) 18,906	(+) 25,169

SEVENTY LEADING CANADIAN COMMODITIES EXPORTED FROM CANADA, 1928-29

NOTES:—Commodities arranged in order of importance; Values in Thousands of Dollars.

Rank	Commodity	Total Domestic Exports 1928-29	Exports to		Increase (+) or Decrease (−) 1928-29 compared with 1927-28		
			United Kingdom	United States	Total	United Kingdom	United States
1	Wheat	428,524	260,007	12,381	(+) 76,407	(+) 15,192	(+) 2,877
2	Printing paper	142,343	9,712	123,098	(+) 13,117	(+) 6,822	(+) 4,693
3	Wheat flour	65,118	16,972	13	(+) 5,238	(−) 3,275	(−) 33
4	Planks and boards	47,664	6,677	36,378	(−) 7,734	(−) 784	(−) 6,142
5	Wood pulp	44,896	1,785	36,942	(−) 2,366	(−) 1,307	(−) 873
6	Automobiles	43,060	5,465	72	(+) 18,219	(+) 747	(−) 15
7	Fish	34,982	3,718	14,804	(+) 1,463	(−) 1,699	(+) 983
8	Copper, ore and blister	26,905	1,603	23,087	(+) 12,393	(−) 168	(+) 10,397
9	Barley	25,744	17,553	29	(+) 2,271	(+) 2,223	(+) 21
10	Cheese	25,182	22,640	1,870	(+) 4,081	(+) 4,812	(−) 574
11	Raw furs	24,250	10,038	13,093	(+) 227	(+) 889	(+) 1,075
12	Whiskey	24,123	86	18,112	(+) 2,638	(−) 38	(−) 268
13	Nickel	23,881	5,149	13,489	(+) 6,854	(−) 636	(+) 6,357
14	Meats	19,185	7,591	10,383	(−) 5,288	(−) 4,151	(−) 906
15	Rubber tires	19,120	1,258	29	(−) 1,154	(−) 2,463	(+) 3
16	Farm implements	15,871	448	4,367	(+) 228	(−) 191	(+) 844
17	Cattle	14,694	62	14,463	(+) 817	(−) 68	(+) 936
18	Pulp wood	14,187	–	14,187	(−) 996	–	(−) 996
19	Raw gold	12,396	22	12,371	(+) 3,361	(+) 21	(+) 3,381
20	Silver ore and bullion	11,840	273	5,970	(−) 22	(+) 259	(+) 1,471
21	Asbestos, raw	11,267	539	7,380	(+) 590	(−) 284	(+) 845
22	Lead	11,130	4,747	873	(−) 750	(+) 491	(+) 526
23	Rye	10,809	5,369	–	(+) 160	(+) 864	(−) 1
24	Oats	10,242	4,043	23	(+) 5,967	(+) 2,648	(−) 479
25	Leather, unmanufactured	9,592	2,012	7,091	(−) 1,594	(−) 441	(−) 1,149
26	Raw hides	9,480	12	9,244	(−) 2,235	(+) 12	(−) 2,173
27	Aluminium in bars	8,608	1,421	4,323	(−) 2,214	(+) 575	(−) 3,596
28	Rubber boots and shoes	8,590	3,258	3	(+) 2,242	(+) 904	(+) 1
29	Zinc	8,307	1,424	198	(+) 188	(+) 206	(+) 88
30	Shingles (wood)	7,793	6	7,663	(+) 973	(+) 4	(+) 950
31	Machinery	7,337	1,379	272	(+) 1,171	(+) 29	(−) 33
32	Fertilizers	6,078	* –	5,536	(+) 664	–	(+) 760
33	Milk and cream, fresh	6,061	2	6,059	(−) 1,781	(+) 1	(−) 1,781
34	Laths (wood)	6,024	–	5,999	(−) 475	–	(−) 471
35	Settlers' effects	5,918	428	5,197	(+) 120	(+) 57	(+) 49
36	Flaxseed	5,745	5	5,741	(+) 1,449	(+) 1	(+) 1,450
37	Malt liquors	5,608	–	5,589	(+) 207	–	(+) 213
38	Bran and shorts	5,496	3	5,352	(+) 2,746	(−) 6	(+) 2,726
39	Apples, green	4,867	3,885	253	(+) 623	(+) 317	(−) 29
40	Logs (wood)	4,649	110	2,354	(−) 336	(+) 12	(−) 742
41	Coal	4,524	148	2,077	(−) 222	(−) 68	(−) 38
42	Films	4,265	2,050	1,330	(+) 723	(+) 709	(−) 67
43	Acids	4,241	2,156	2,021	(+) 911	(−) 79	(+) 991
44	Soda and soda compounds	3,920	–	2,023	(+) 253	–	(+) 660
45	Square timber	3,854	571	211	(+) 647	(+) 147	(−) 9

SEVENTY LEADING CANADIAN COMMODITIES EXPORTED FROM CANADA, 1928-29—*Concluded*

NOTES:—Commodities arranged in order of importance; Values in Thousands of Dollars

Rank	Commodity	Total Domestic Exports 1928-29	Exports to		Increase (+) or Decrease (−) 1928-29 compared with 1927-28		
			United Kingdom	United States	Total	United Kingdom	United States
46	Ferro-manganese and ferro-silicon	3,841	–	3,792	(+) 1,102	–	(+) 1,067
47	Milk, condensed	3,721	895	438	(−) 269	(−) 243	(−) 83
48	Poles (wood)	3,450	–	3,450	(+) 120	–	(+) 124
49	Abrasives, artificial crude	3,446	239	3,088	(+) 625	(+) 56	(+) 583
50	Potatoes	3,084	–	1,141	(−) 4,255	–	(−) 3,452
51	Oatmeal	3,073	2,073	–	(+) 1,274	(+) 592	–
52	Raw wool	2,797	211	2,530	(−) 353	(−) 509	(+) 178
53	Electric apparatus	2,401	299	95	(+) 552	(+) 7	(−) 3
54	Automobile parts	2,383	121	144	(−) 184	(+) 37	(+) 75
55	Paper board	2,311	697	1,248	(−) 346	(−) 143	(−) 180
56	Cereal foods	2,239	2,177	7	(+) 180	(+) 154	(+) 4
57	Tubes and pipe (iron)	2,222	80	745	(+) 468	(−) 40	(+) 78
58	Sugar, refined	2,176	621	1	(−) 4,085	(−) 2,107	(−) 37
59	Hardware and cutlery	1,970	678	110	(−) 915	(+) 176	(−) 27
60	Raw tobacco	1,955	1,926	2	(−) 261	(−) 286	–
61	Clover seed	1,890	229	1,529	(−) 812	(−) 167	(−) 468
62	Wrapping paper	1,814	310	16	(+) 171	(+) 37	(+) 15
63	Fish oils	1,742	–	1,428	(+) 749	–	(+) 443
64	Binder twine	1,317	–	573	(−) 736	(−) 12	(−) 250
65	Crude petroleum	1,309	493	766	(+) 495	(+) 189	(+) 284
66	Hay	1,127	496	440	(−) 557	(−) 88	(−) 459
67	Rolling mill products	1,057	12	258	(−) 837	(−) 49	(+) 99
68	Musical instruments	768	34	254	(−) 504	(−) 15	(+) 33
69	Butter	765	1	71	(−) 289	(−) 14	(−) 30
70	Aluminium manufactures	665	47	4	(+) 52	(+) 9	(−) 18
	Total value of above commodities	1,291,893	416,266	464,080	(+) 131,169	(+) 19,868	(+) 19,898
	Total value of exports (Canadian)	1,363,587	429,731	500,167	(+) 135,379	(+) 19,040	(+) 23,163
	Percentage represented by above commodities	94·7	96·8	92·7	–	–	–

CANADA'S TRADE VIA THE UNITED STATES, 1926-29

There has been a steady decline in the imports into Canada from overseas countries via the United States, especially in imports from the British Empire. The decrease in the total imports via the United States during the fiscal year 1929 compared with 1926 amounted to $3,176,751; the imports from the United Kingdom showing a decrease of $865,314; from other British countries, a decrease of $4,614,239; while imports from foreign countries show an increase of $2,302,802. The appended table shows that imports from the United Kingdom via the United States from 1926 to 1929 decreased from $1,853,066 to $987,752; from other British countries from $6,260,189 to $1,645,950; while imports from foreign countries during the same interval increased from $6,106,030 to $8,408,832. The proportions were: United Kingdom, 1926, 1·1 per cent; 1929, 0·5 per cent; other British countries, 1926, 14·2 per cent; 1929, 2·6 per cent; and foreign countries, 1926, 5·5 per cent; 1929, 6·0 per cent.

IMPORTS INTO CANADA VIA THE UNITED STATES

Imports from	Years ended March 31			
	1926	1927	1928	1929
United Kingdom via United States	$ 1,853,066	$ 728,001	$ 773,694	$ 987,752
Per cent of total imports from United Kingdom	1·1	0·4	0·4	0·5
Other British Empire via United States	$ 6,260,189	$ 3,832,540	$ 2,241,007	$ 1,645,950
Per cent of total imports from other British Empire	14·2	7·7	3·5	2·6
Foreign Countries via United States	$ 6,106,030	$ 8,200,679	$ 9,102,893	$ 8,408,832
Per cent of total imports from foreign countries	5·5	6·3	6·5	6·0
Total imports via United States	$ 14,219,285	$ 12,761,220	$ 12,117,594	$ 11,042,534
Per cent of total imports from Overseas Countries	4·5	3·7	3·1	2·9

Exports from Canada to overseas countries via the United States show very little change during the past four years. In 1926 the proportion was 39·2 per cent; in 1927, 39·5 per cent; in 1928, 38·9 per cent; and in 1929, 36·7 per cent. The statistics in the following table show that Canada's exports to overseas countries via the United States were: United Kingdom, in 1926, $237,327,986; in 1929, $217,590,205; other British countries in 1926, $22,157,401; in 1929, $30,749,198; and foreign countries, in 1926, $70,466,599; and in 1929, $68,850,420. The proportions were: United Kingdom, 1926, 46·6 per cent; 1929, 50·6 per cent; other British countries, 1926, 24·3 per cent; 1929, 28·9 per cent; and foreign countries, 1926, 29·1 per cent; 1929, 21·0 per cent.

EXPORTS FROM CANADA VIA THE UNITED STATES

Exports to	Years ended March 31			
	1926	1927	1928	1929
United Kingdom via United States	$ 237,327,986	$ 216,313,069	$ 201,784,594	$ 217,590,205
Per cent of total exports to United Kingdom	46·6	48·4	49·1	50·6
Other British Empire via United States	$ 22,157,401	$ 23,549,163	$ 26,762,373	$ 30,749,198
Per cent of total exports to other British Empire	24·3	25·1	30·2	28·9
Foreign countries via United States	$ 70,466,599	$ 70,422,646	$ 63,060,434	$ 68,850,420
Per cent of total exports to Foreign Countries	29·1	28·7	25·1	21·0
Total Exports via United States	$ 329,951,986	$ 310,284,878	$ 291,607,401	$ 317,189,823
Per cent of total exports to Overseas Countries	39·2	39·5	38·9	36·7

Canada's Position in International Trade

The statistics in the following table showing total trade of ten leading countries of the world, indicate that Canada continues to improve her position in international trade. In 1913 Canada occupied eighth position in total trade, being exceeded by the United Kingdom, Germany, the United States, France, the Netherlands, British India and Italy, but in 1928 she had advanced to fifth position, having displaced the Netherlands, British India and Italy.

TOTAL TRADE OF TEN LEADING COUNTRIES OF THE WORLD

Rank			Countries	Years ended December 31		
1913	1927	1928		1913	1927	1928
				$	$	$
3	1	1	United States	4,205,147,000	8,836,200,000	9,021,675,000
1	2	2	United Kingdom	5,764,185,000	8,786,426,000	8,760,074,000
2	3	3	Germany	4,966,298,000	5,798,125,000	6,075,082,000
4	4	4	France	2,953,199,000	4,236,519,000	4,107,967,000
8	5	5	Canada	1,095,282,000	2,285,010,000	2,547,690,000
6	6	6	British India	1,376,068,000	2,059,253,000	2,120,829,000
7	8	7	Italy	1,188,354,000	1,853,210,000	1,918,883,000
5	10	8	Netherlands	2,814,404,000	1,784,343,000	1,880,173,000
10	7	9	Japan	676,761,000	1,903,237,000	1,879,837,000
9	9	10	Argentina	872,187,000	1,800,815,000	1,862,411,000

In import trade Canada, according to statistics in the following table showing net imports into ten leading countries of the world, occupied eighth position in 1913, being exceeded by the United Kingdom, Germany, United States, France, the Netherlands, Belgium and Italy. In 1928 she had advanced to fifth position, displacing the Netherlands, Belgium and Italy.

NET IMPORTS INTO TEN LEADING COUNTRIES OF THE WORLD

Rank			Countries	Years ended December 31		
1913	1927	1928		1913	1927	1928
				$	$	$
1	1	1	United Kingdom	3,207,951,000	5,335,448,000	5,239,394,000
3	2	2	United States	1,756,863,000	4,077,886,000	3,991,993,000
2	3	3	Germany	2,563,331,000	3,366,072,000	3,354,048,000
4	4	4	France	1,625,317,000	2,071,828,000	2,095,172,000
8	5	5	Canada	659,064,000	1,066,673,000	1,197,939,000
7	6	6	Italy	703,608,000	1,049,018,000	1,156,861,000
5	7	7	Netherlands	1,575,036,000	1,022,369,000	1,080,537,000
10	8	8	Japan	363,257,000	995,362,000	991,439,000
9	9	9	British India	594,121,000	896,897,000	910,849,000
6	10	10	Belgium	894,865,000	807,602,000	880,011,000

In export trade Canada has made greater progress than in import trade, as the statistics in the following table showing domestic exports of ten leading countries of the world indicate. Canada in 1913 occupied ninth position in export trade, being exceeded by the United Kingdom, the United States, Germany, France, the Netherlands, British India, Belgium and Argentina, but in 1928 she had moved up to fifth position, displacing the Netherlands, British India, Belgium and Argentina.

DOMESTIC EXPORTS FROM TEN LEADING COUNTRIES OF THE WORLD

Rank			Countries	Years ended December 31		
1913	1927	1928		1913	1927	1928
				$	$	$
2	1	1	United States	2,448,284,000	4,758,314,000	5,029,682,000
1	2	2	United Kingdom	2,556,234,000	3,450,978,000	3,520,680,000
3	3	3	Germany	2,402,967,000	2,432,053,000	2,721,034,000
4	4	4	France	1,327,882,000	2,164,691,000	2,012,795,000
9	5	5	Canada	436,218,000	1,218,337,000	1,349,751,000
6	6	6	British India	781,947,000	1,162,356,000	1,209,980,000
8	7	7	Argentina	465,582,000	973,999,000	987,195,000
10	8	8	Japan	313,504,000	907,875,000	888,398,000
7	10	9	Belgium	701,475,000	739,179,000	840,454,000
5	9	10	Netherlands	1,239,368,000	761,974,000	799,636,000

In trade per capita Canada has also made a very creditable showing since 1913, as the statistics in the following table giving per capita trade of ten leading countries of the world show. In the year 1913 Canada occupied fifth position in import trade per capita; seventh position in export trade per capita; and sixth position in total trade per capita; but in 1928 she occupied fifth place in imports per capita; second place in exports per capita; and second place in total trade per capita.

PER CAPITA TRADE OF TEN LEADING COUNTRIES OF THE WORLD

Rank 1913	Rank 1928	Countries	Years ended December 31 — 1913 Import Trade	1913 Export Trade	1913 Total Trade	1928 Import Trade	1928 Export Trade	1928 Total Trade
			$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
3	1	New Zealand	98 89	97 01	195 90	148 07	182 57	330 64
6	2	Canada	87 55	57 95	145 50	124 03	139 75	263 78
7	3	Denmark	75 08	61 55	136 63	124 94	118 67	243 61
1	4	Netherlands	256 35	201 71	458 06	139 98	103 59	243 57
4	5	Switzerland	97 99	70 25	168 24	132 66	103 16	235 82
2	6	Belgium	118 07	92 55	210 62	110 94	105 96	216 90
5	7	Australia	78 30	74 78	153 08	105 58	102 87	208 45
8	8	United Kingdom	69 68	55 52	125 20	114 83	77 16	191 99
10	9	Argentina	46 74	53 61	100 35	82 20	92 72	174 92
9	10	Norway	60 11	41 46	101 57	95 51	63 93	159 44

In 1913 Canada occupied tenth position among the ten leading countries of the world in trade balance, as indicated in the following table showing trade balances of ten leading countries of the world. In 1913 Canada's trade balance was unfavourable to the extent of $222,900,000 or $29.61 per capita, but in 1928 she occupied third position, with a favourable trade balance of $151,-800,000. In 1928, as in 1913, the United States occupied first place and British India second place in amount of favourable trade balance. Canada occupies second place in the world in favourable trade balance per capita, New Zealand being in first position. The standing for New Zealand was $34.50; Canada $15.72; and Argentina $10.52.

TRADE BALANCES OF TEN LEADING COUNTRIES OF THE WORLD

NOTE:—Favourable balance marked (+); Unfavourable balance marked (−)

Rank 1913	Rank 1927	Rank 1928	Countries	Years ended December 31 — 1913 Amount	1913 Per capita	1927 Amount	1927 Per capita	1928 Amount	1928 Per capita
				Million $	$ cts.	Million $	$ cts.	Million $	$ cts.
1	1	1	United States	(+) 691·4	(+) 7 13	(+) 680·4	(+) 5 74	(+)1,037·7	(+) 8 65
2	2	2	British India	(+) 187·8	(+) 0 60	(+) 265·5	(+) 0 83	(+) 299·1	(+) 0 94
10	3	3	Canada	(−) 222·9	(−) 29 61	(+) 151·7	(+) 15 93	(+) 151·8	(+) 15 72
3	4	4	Argentina	(+) 59·0	(+) 6 78	(+) 147·2	(+) 14 22	(+) 111·9	(+) 10 52
4	7	5	New Zealand	(−) 2·0	(−) 1 90	(+) 15·3	(+) 10 73	(+) 49·8	(+) 34 50
6	5	6	Brazil	(−) 11·3	(−) 0 46	(+) 44·1	(+) 1 19	(+) 33·1	(+) 0 84
9	6	7	British South Africa	(−) 62·6	(−) 9 00	(+) 18·3	(+) 2 43	(−) 3·4	(−) 0 35
7	10	8	Australia	(−) 16·6	(−) 3 51	(−) 100·5	(−) 16 30	(−) 17·0	(−) 2 71
8	9	9	Denmark	(−) 37·5	(−) 13 51	(−) 29·3	(−) 8 49	(−) 21·8	(−) 6 27
5	8	10	Sweden	(−) 7·9	(−) 1 41	(+) 9·8	(+) 1 61	(−) 38·4	(−) 6 31

THE COMMERCIAL INTELLIGENCE SERVICE

The Director of the Commercial Intelligence Service reports that, although with much less frequency, the question is still asked as to what the Department is doing to assist Canadian exporters. In season and out of season, the Commercial Intelligence Service has tried to show not only what it has done but what it is prepared to do to help Canadian manufacturers to enter foreign markets, through the efforts of a well-trained body of Trade Commissioners abroad.

The preliminary trade figures for the fiscal year ending March 31, 1929, will show that, without exception, in every country where the Commercial Intelligence Service was represented by a Trade Commissioner, there has

been an increase in trade. These Trade Commissioners were posted primarily where it was reasonable to expect that additional trade might be secured, but, at the same time, these increases are not accidental. Evidence is available in the records of the department at Ottawa positively to identify Trade Commissioners with these increases.

EXPANSION OF THE SERVICE

To the majority of manufacturers in the Dominion who are seeking and finding outlets for their products in foreign lands, the Service, in its thirty years of existence, has come to be accepted as an important factor in the remarkable development that has taken place. For purposes of comparison, the following table will show the increase in the number of offices and personnel (i.e., Trade Commissioners, Assistant Trade Commissioners and Junior Trade Commissioners) at the end of each of the fiscal years mentioned:—

Fiscal Year	Offices	T. C.'s	A. T. C.'s	J. T. C.'s	Total Personnel
1914	19	16	—	—	16
1919	18	17	—	—	17
1925	23	23	7	—	30
1929	32	31	11	8	50

Naturally, there was no development during the war period. With the passing of the Civil Service Act in 1918 all appointments to the Government service were regulated by competitive examination. Offices which had become vacant were filled by the appointment of several Trade Commissioners who were sent abroad immediately. Active recruiting commenced at the rate of about four Junior Trade Commissioners yearly. This ensured a steady supply of young men who, on the completion of their service at Ottawa, were posted to offices abroad as Assistant Trade Commissioners, so that when new offices were created or vacancies occurred, there would be no delay in filling these posts efficiently.

NEW OFFICES

By the end of the present fiscal year a sufficient number of Assistant Trade Commissioners were available, with two or more years of practical experience, to justify consideration being given to the question of expansion. After surveying the territories in which it appeared reasonable to hope for an expansion of Canadian trade, authority was obtained to open seven new offices to cover the following territories:—

Lima, Peru—Peru, Bolivia and Ecuador.
Oslo, Norway—The Scandinavian countries and Finland.
Hongkong—Southern China, the Philippines, and Indo-China.
Panama City, Panama—The Republics of Panama, Venezuela and Colombia.
Athens, Greece—Greece and Turkey.
Chicago and San Francisco, United States.

The Assistant Trade Commissioners to be promoted to take charge of these new offices were notified of what was in prospect, and early in the new fiscal year all of these offices, with the exception of San Francisco, will be in existence.

Coincident with this expansion in the number of offices and increase in personnel during the past eight years, there has been a corresponding improvement in organization and methods both in the department and in the Trade Commissioners' offices—in fact, the progress in this respect has been greater in the past eight years than in the twenty-five preceding years.

The creation of the Foreign Tariffs Division, the inauguration of the Exporters' and Importers' Directories, the cataloguing under commodity headings of all data relating to the markets for Canadian products, are some of the developments which have taken place.

SUMMARY OF RESULTS

Even at the risk of reiteration, it must again be pointed out how impossible it is, by any system of statistics, to represent adequately not only the activities of Canadian Trade Commissioners abroad, but more particularly the extent to which they have influenced and assisted new business for Canadian firms. An examination of the Annual and Quarterly Progress Reports received from each office during the year shows the following:—

New business reported	$5,500,000
Number of agents appointed	377
Number of special investigations into foreign markets for Canadian firms	3,618

The statement that a number of agents have been appointed on the recommendation, or through the assistance of, Trade Commissioners, is simply an indication that certain business has been initiated but, in the great majority of cases, direct evidence is naturally not obtainable as to the value of the business which resulted. The part which the Trade Commissioner plays in such negotiations ends when the arrangement is completed, and thereafter, for obvious reasons, it is no part of his duty to ascertain from firms so aided what subsequent developments have been. In recent years, however, there has been noted a growing disposition on the part of Canadian exporters, familiar with the work of the Commercial Intelligence Service, to report to what extent business has been developed through the assistance of the Trade Commissioners. In the course of a year hundreds of letters of appreciation are received.

ILLUSTRATIONS OF ASSISTANCE RENDERED

What may be regarded as an outstanding example of the kind of service that is rendered by the Trade Commissioners, reported to the department by the Canadian firm concerned, may be cited. The Canadian Trade Commissioner at Brussels learned in November last that, owing to the failure of the apple crop in Europe, there was an excellent opportunity in that market for Canadian apples. He reported the situation to the Canadian Fruit Trade Commissioner at Liverpool, who cabled the Fruit Commissioner of the Department of Agriculture, with whom, in so far as the marketing of apples and vegetables is concerned, the department at Ottawa acts in co-operation. The opportunity was then telegraphed to shippers in the Maritime Provinces and Ontario who were likely to be in a position to take advantage of it, and as a result orders were secured for over 74,000 barrels which, at a c.i.f. price of $5.50 per barrel, brought the total sales of apples to Belgium up to $403,000. Prior to this season, practically no Canadian apples have been shipped to Belgium.

The following letter is quoted as another example of how business is secured by Canadian firms, often without the knowledge of the department. It is a reply from an exporter who was asked whether or not he wished to have his name retained in the Exporters' Directory:—

> Please keep my name in the Exporters' Directory. I have received good results from the Trade Commissioners abroad, and foreign firms. Last year I sold over $50,000 worth of canned lobsters and apples, largely due to firms' names received through the Trade Commissioners in foreign countries.

CANADIAN EXPORTERS' EXCEPTIONAL ADVANTAGES

Canadian firms seeking to exploit foreign markets have two exceptional advantages which are probably not often realized. Being comparatively few

in number, their inquiries can receive the personal attention of the Trade Commissioner: that is, it is possible for him to call upon or to communicate individually with importers in his territory whom he considers likely to be interested in the connection offered. This condition also makes for speed in ascertaining possibilities and reporting the information back to the Canadian inquirer.

In the same way and for the same reasons a Canadian Trade Commissioner returning to Canada on tour can, during the course of his visit, call upon and discuss export problems with every firm known to be exporting or interested in exporting to his territory.

VISITS OF TRADE COMMISSIONERS TO CANADA

The periodical return of Trade Commissioners for official tours of the Dominion is therefore one of the most important factors in effecting practical co-operation between the Canadian exporter and the foreign importer. From what are known as tropical posts a Trade Commissioner is entitled to return to Canada every second year, from a semi-tropical post every third year, and from all other posts every fourth year. By the adoption of this schedule something like uniformity is obtained in the number of Trade Commissioners visiting Canada each year.

Trade Commissioners, well in advance of the time they are to arrive in Canada, circularize individual exporters for the purpose of determining what special points they wish to take up and on which full information is secured. In addition to this form of publicity, the department publishes a notice in the *Commercial Intelligence Journal* inviting firms who may be interested in any particular territory from which a Trade Commissioner is returning to state whether or not an interview is desired, and the names of such firms, together with those with whom the Trade Commissioner has been in communication, form the basis of the itinerary. A tour occupies from five to six months and as a general rule a Trade Commissioner visits each industrial centre from Halifax to Vancouver. The number of firms interviewed is never less than 200 and in some instances over 300.

The following table gives the names of Trade Commissioners who returned for this purpose during the year under review with an indication of the dates of their tours:—

J. A. Langley, Kobe	November, 1927–August, 1928.
A. S. Bleakney, Rio de Janeiro	December, 1927–May, 1928.
L. M. Cosgrave, Shanghai	March–July, 1928.
J. Forsyth Smith, Canadian Fruit Trade Commissioner, Liverpool	June–September, 1928.
H. A. Scott, Liverpool	June–December, 1928.
J. J. Guay, Brussels	June–December, 1928.
G. R. Stevens, Cape Town	September–April, 1929.

SPECIAL TOURS OUTSIDE OF CANADA

With a relatively small number of offices the territory, and in some cases the territories, for which Trade Commissioners are responsible must necessarily be large. To cover the ground, if only to establish and maintain contact with sources of information, considerable travelling must be undertaken. Each Trade Commissioner endeavours, as far as possible, to visit all or some portion of his territory during the year and some of the special trips are listed as follows:—

Frederic Hudd, New York.—Accompanied the Second Annual Good Will Tour of the Border Chamber of Commerce through the Mississippi Valley in February and March.

C. Noel Wilde, Mexico City.—Two months' tour of Central American Republics, including Guatemala, El Salvador, Nicaragua, Costa Rica, Honduras and Panama.

James Cormack, Havana.—Tour of Santo Domingo and Porto Rico.

J. C. Macgillivray, Rotterdam.—First tour of Rhine Valley, which territory was transferred from the Hamburg office to the Rotterdam office last year; also visited Switzerland.

A. B. Muddiman, Milan.—Important commercial centres in Northern Italy, Spain, and Portugal.

D. H. Ross, Melbourne.—Western Australia.

L. D. Wilgress, Hamburg.—Baltic States of Latvia, Esthonia and Lithuania.

J. H. English, New York.—Detroit, Chicago, Cleveland, Philadelphia, and Washington.

H. R. Poussette, Calcutta.—Principal cities of Burma and Iraq.

Hercule Barré, Paris.—Chief commercial centres of Algeria, Morocco, Tunisia, Syria, Egypt, and Palestine.

L. M. Cosgrave, Shanghai.—Hong Kong and South China.

William Gilchrist, Chief of the Foreign Tariffs Division.—British West Indies.

J. A. Langley, Kobe.—Korea.

C. M. Croft, Auckland.—During the latter part of October and November, 1928, accompanied the Commerce Train, operated by the Auckland Chamber of Commerce, on a tour of the leading business centres of New Zealand.

A. S. Bleakney, Rio de Janeiro.—Sao Paulo.

G. R. Heasman, Batavia.—Singapore, Penang and Bangkok.

RESPONSIBILITY OF EXPORTERS

The Commercial Intelligence Service believes that it is working along good lines, with officers who are eager, keen and efficient. They are fully alive to their responsibility to Canadian exporters, and Canadian exporters in their turn should have some realization of their responsibility as well as of their opportunities. Firms who are contemplating an extension of their business to foreign markets should endeavour to master the fundamentals of export practice. Some firms who have experimented in export have had unfortunate experiences which, in almost every instance, can be attributed to lack of knowledge of essentials and the adoption of ordinary precautions.

In advising potential exporters to utilize the experience and assistance of Trade Commissioners, too much emphasis cannot be placed upon the absolute necessity of furnishing the fullest detailed information as to the nature of the products to be exported, export prices, catalogues and samples, the proportion of production which will be devoted to export trade, terms of credit acceptable, and agent's commission. Equally vital is prompt attention to correspondence. The Commercial Intelligence Service at Ottawa is called upon to investigate every year many complaints submitted by Trade Commissioners, either on their own behalf or on behalf of foreign importers with whom they have been in contact, and the majority of these arise out of failure to reply promptly to letters. This is not to be attributed altogether to indifference or to lack of courtesy, but rather to the fact that to no particular officer in the firm is assigned the special duty of dealing with export correspondence and ensuring prompt attention thereto. Fortunately, the number of complaints is decreasing, and would probably disappear if the offenders realized that carelessness not only reacts upon their own chances of success in the export field, but reflects upon the good name and reputation of Canadian manufacturers as a whole.

CHANGE OF OFFICE ADDRESSES

Advantage was taken of the opportunities which occurred to secure better accommodation for five offices. For many years the Trade Commissioner in Paris shared the offices of the Canadian Commissioner General. On July 15, when the Hon. Philippe Roy, the Canadian Minister to France, took possession of the new Canadian Legation Building on the rue François 1, Hercule Barré was instructed to secure quarters in the Royal Bank Building, 3 rue Scribe. This location, it was believed, would be more suitable for the Trade Commissioner's office than the Legation.

Since his appointment as Special Fruit Trade Commissioner, J. Forsyth Smith had occupied the same suite of offices as Harry A. Scott, at Liverpool. In January, Mr. Smith was transferred to London, which has become the best centre for his work.

Messrs. E. L. McColl, at Buenos Aires; G. B. Johnson, at Glasgow; and J. A. Langley, at Kobe, were able to obtain more suitable offices.

CONFERENCE OF TRADE COMMISSIONERS AT PARIS

A conference of the eleven Trade Commissioners in the United Kingdom and on the Continent was held in Paris from May 9 to 11, presided over by the Director. This was the first occasion when any number of Trade Commissioners have had an opportunity of discussing collectively their problems and the results of the three days' sessions were eminently satisfactory. The chief benefits included the attainment of a better understanding as to the purpose and interpretation of Departmental methods, plans for more effective co-operation between the offices concerned, and the establishment of a sound basis for future work. A redistribution of territory affecting the offices on the Continent was one of the results. This reallocation has effected a much better distribution of responsibility, and not only have more definite contacts been established, but it will be possible hereafter to have the continental countries covered regularly by tours.

CHANGES AFFECTING PERSONNEL

The record of appointments, promotions and transfers for the year may be briefly indicated as follows:—

O. M. Armstrong, promoted from Junior to Assistant Trade Commissioner at Buenos Aires, April 21, 1928.

C. S. Beck, appointed Junior Trade Commissioner, July 25, 1927, resigned from the Service on February 1, 1928.

B. C. Butler, appointed Junior Trade Commissioner, March 4, 1929.

W. F. Bull, appointed Junior Trade Commissioner, March 4, 1929.

M. Belanger, appointed Junior Trade Commissioner, February 15, 1929.

C. S. Bissett, promoted from Assistant Trade Commissioner to Trade Commissioner, Grade 1, at Cape Town, October 1, 1928.

H. W. Brighton, appointed Junior Trade Commissioner, to report for duty April 11, 1929.

A. E. Bryan, Travelling Inspector, resigned, to take effect April 1, 1929.

H. W. Cheney, appointed Secretary, Commercial Intelligence Service, June 28, 1928.

V. E. Duclos, promoted from Junior to Assistant Trade Commissioner at London, April 10, 1928.

J. H. F. English, Assistant Trade Commissioner, New York, since March 16, 1927, transferred temporarily to Kingston, March, 1928; promoted Trade Commissioner, Grade 1, Dublin, January 11, 1929.

F. W. Fraser, Trade Commissioner at Dublin since July, 1926, transferred to Kingston, Jamaica, early in January, replacing P. W. Cook, who resigned March 31, 1928.

R. Grew, Assistant Trade Commissioner at Kobe since December 18, 1926, transferred to Calcutta on March 7, and to be promoted Trade Commissioner, June 1, 1929.

L. S. Glass, Assistant Trade Commissioner at Bristol, transferred temporarily to Glasgow on February 13, 1928, for a period of about two months, to assist G. B. Johnson on the completion of his tour of Canada.

E. E. Gauvreau, appointed Junior Trade Commissioner, June 5, 1928; promoted to Assistant Trade Commissioner at Lima, Peru, effective June 4, 1929.

G. R. Heasman, promoted from Junior to Assistant Trade Commissioner, Batavia, Java, May 13, 1928; Acting Trade Commissioner on transfer of R. S. O'Meara, January 26, 1929.

B. A. Macdonald, appointed Junior Trade Commissioner, March 16, 1929.

P. V. McLane, appointed Junior Trade Commissioner, August 14, 1928, and promoted Assistant Trade Commissioner, effective April 12, 1929.

J. L. Mutter, appointed Junior Trade Commissioner, June 12, 1928, and promoted Assistant Trade Commissioner, at Cape Town, effective June 3, 1929.

G. A. Newman, appointed Junior Trade Commissioner, February 26, 1929.

R. S. O'Meara, Trade Commissioner at Batavia, sailed for Canada January 26, 1929, preparatory to taking over the new office to be opened at Chicago in April, 1929.

H. L. E. Priestman, appointed Junior Trade Commissioner to report for duty on April 16, 1929.

H. R. Poussette, Trade Commissioner at Calcutta, was transferred from the beginning of the new fiscal year to open a new office at San Francisco.

M. B. Palmer, promoted from Junior to Assistant Trade Commissioner at Hamburg, August 28, 1928.

F. H. Palmer, formerly Trade Commissioner at Milan, but who resigned on May 5, 1927, reentered the Service, by means of competitive examination, as Junior Trade Commissioner on February 20, 1929, and was sent to Oslo to open up a new office, with the rank of Assistant Trade Commissioner; to be promoted Trade Commissioner in due course.

W. J. Riddiford, appointed Junior Trade Commissioner, June 6, 1928, and promoted Assistant Trade Commissioner, Shanghai, effective April 15, 1929.

G. R. Stevens, Trade Commissioner at Cape Town, was transferred on October 1, 1928, to have charge of the new office to be opened at Lima, Peru. His tour of Canada had not been completed at the end of the fiscal year, but arrangements had been made for the opening of the new office in May, 1929.

Paul Sykes, Assistant Trade Commissioner, at Auckland, was transferred on March 28, 1929, to Hongkong to open a new office, his promotion to Trade Commissioner to date from arrival at his new post, namely, May 6, 1929.

J. A. Strong, Assistant Trade Commissioner, at Liverpool, was notified of the intention to promote him to Trade Commissioner to have charge of a new office to be opened at Panama City in June, 1929.

R. U. Slayter, appointed Junior Trade Commissioner, July 6, 1928, and promoted to Assistant Trade Commissioner, New York, January 12, 1929.

J. G. F. Speers, appointed Junior Trade Commissioner, March 1, 1928, resigned from the Service August 9, 1928.

A. J. Tingley, appointed Junior Trade Commissioner, February 18, 1929.

L. J. H. Turcot, Assistant Trade Commissioner at Milan since November 2, 1927, was transferred to Paris, February 1, 1929, and was notified of the intention to promote him to Trade Commissioner to have charge of a new office to be opened at Athens in June, 1929.

M. J. Vechsler, appointed Junior Trade Commissioner, July 16, 1928, on the opening of the new office at Chicago in April is to be promoted to Assistant Trade Commissioner.

The World's Customs Tariffs

Tariff changes throughout the world are still more frequent than before the war. While only a few countries issued completely revised tariffs during 1928-29, many customs schedules were amended to a substantial degree and several new commercial treaties were arranged. Some of the treaties established lower duties on selected articles, but the main effect of treaty-making was to extend to the contracting states reduced rates already in existence through the operation of the most-favoured-nation clause. In one way or another the effective rates of the world's tariffs were much altered. The whole subject is so large that in this review reference will be made only to Empire preferential tariff changes, to trade agreements directly concerning Canada and to an outstanding treaty and tariff development—Chinese customs autonomy.

EMPIRE PREFERENTIAL TARIFFS

Great Britain.—Great Britain reduced by approximately one-half cent per pound the duty on raw sugar (sugar testing not over 98 degrees polarization), whether of Empire or foreign origin. The duty on Empire sugar, even when refined (over 98 degrees polarization), was also reduced by an average of one-half cent per pound, making the rates 4 shillings 9·2 pence or 5 shillings 10 pence per hundredweight of 112 pounds. The duty on foreign sugar of this class remained at 11 shillings 8 pence per hundredweight. The change in sugar duties became effective April 25, 1928. At the same time the preferential schedule was lowered on molasses, glucose and saccharin, while the general tariff remained the same. On April 28, 1928, a duty of 33⅓ per cent, ad valorem was levied on buttons, and on June 13, 1928, a rate of 25 per cent ad valorem on wrought enamelled hollow-ware of iron or steel, there being Empire preferential rebates in both cases of one-third of the duty. In consequence of the change in sugar

duties, confectionery and other goods containing sugar were accorded larger preferences as from July 1, 1928, by reducing the preferential rates on such goods, while maintaining the same general tariff.

The Merchandise Marks law of Great Britain, enacted at the end of 1926 empowering the Government to order, after inquiry by a Standing Committee, that goods as designated be marked so as to indicate whether they are of Empire or of foreign origin, had up to April 1, 1928, produced only one order. This order affected some half-dozen articles. Six such marking orders were made during the twelve months ended March 31, 1929, each of which also included several commodities. On July 13, 1928, orders were issued requiring marks of origin at the time of importation, on the following goods: Fresh apples, insulated electric cables and wires, electric incandescent lamps, pottery. On December 21, 1928, similar marking orders were made with regard to oat products, eggs in the shell, dried eggs, currants, sultanas and raisins, flame safety lamps and parts, cutlery, ball and roller bearings. These goods require marks of origin both on importation and on sale or exposure for sale in the United Kingdom. The orders in regard to most goods affected prescribe only that they bear an indication of origin at the time of sale or exposure for sale. Orders are usually made effective from three to six months after date of issue.

Irish Free State.—The Irish Free State as from April 26, 1928, imposed an import duty of 33⅓ per cent ad valorem on the chassis of commercial motor vehicles and on rubber tires for all kinds of motor vehicles, both of which had formerly been free of duty. There is an Empire preferential rate one-third lower than the full rate. The Irish Free State as from February 1, 1929, increased from 25 per cent to 50 per cent the British content (material and/or labour) required in motor omnibuses or motor cars for the conveyance of goods, before they would be eligible for tariff preference. A general tariff of 25 per cent and a British preferential tariff (applicable to Canada) of 20 per cent was imposed as from February 21, 1929, on wool and worsted goods (other than blanketing and floor coverings) when weighing 7 ounces or more per square yard and valued at more than 1 shilling 6 pence per square yard (changed to 2 shillings 6 pence on May 23, 1929).

Bermuda.—A revised tariff of Bermuda, made effective on January 1, 1929, provided an increase from 10 per cent to 25 per cent in the surtax on goods of non-British origin. The effect of the change on a wide range of manufactured goods imported into Bermuda is that the general tariff is advanced from 11 per cent ad valorem to 12½ per cent ad valorem, while the British preferential tariff (applicable to Canada) remains at 10 per cent ad valorem. In the Canada-West Indies Trade Agreement of 1925, which included Bermuda, the minimum preference guaranteed was a removal of the then existing 10 per cent surtax.

Fiji.—In consequence of a tariff revision in Fiji made effective as from January 1, 1929, the prevailing ad valorem rates of 15 per cent British preferential tariff, and 27½ per cent general tariff, were increased to 20 per cent and 35 per cent respectively. Some goods are free if entitled to preferential tariff treatment and otherwise 15 per cent ad valorem. The 20 per cent preferential rate applies to many articles exported from Canada to Fiji. The new general tariff on goods subject to duty on a quantity basis is either 50 per cent or 100 per cent higher than the preferential tariff.

British Borneo.—Following the example of Brunei, which in 1926 established a British preferential tariff (applicable to Canada) on motor vehicles of one-half the general tariff, some British preferential rates have been adopted in the other British areas of the island of Borneo. Preferential rebates to Great

Britain of one-quarter of the duty on vehicles, vessels, metals, machinery, cutlery, timepieces, pottery, glassware, some textile goods, chemicals and dyes, and perfumery, went into operation in British North Borneo on December 1, 1927, and were extended to Canada on December 22, 1928. Sarawak preferences amounting to the whole of the duty were accorded to Great Britain on November 19, 1928, as regards automobiles and parts, and on March 12, 1929, on engines and machinery. Sarawak extended these preferences to the rest of the Empire, including Canada, as from April 1, 1929. The general tariff in the three British customs areas of Borneo on the aforementioned articles ranges from 5 per cent to 20 per cent ad valorem.

CANADIAN TRADE AGREEMENTS

Spain.—A Canadian Act of Parliament assented to June 11, 1928, and proclaimed in force as from August 1, 1928, sanctioned a Treaty of Commerce and Navigation of October 31, 1922, between the United Kingdom and Spain, as revised by a Convention of April 5, 1927, also an Anglo-Spanish Agreement of June 27, 1924, regulating the treatment of joint stock companies and other business associations. By this measure Canada and Spain established reciprocal exchange of most-favoured-nation tariff treatment of each other's goods with special reservation in regard to Spanish imports from Portugal and Spanish Morocco.

Canada and Spain had before granted each other their lowest tariffs based on an Anglo-Spanish Exchange of Notes in 1894, but a new situation arose shortly after the conclusion of the aforementioned Anglo-Spanish treaty of 1922. Canada and Spain finally withdrew all tariff concessions from each other, but negotiations went on with a view to a reciprocal tariff arrangement. A temporary agreement made effective as from April 20, 1925, secured for Canada the Spanish Second Tariff (about one-third of the First Tariff) in return for the Canadian Intermediate tariff on Spanish goods. This agreement is replaced by the present arrangement establishing complete most-favoured-nation tariff relationship between the two countries.

Most-favoured-nation treatment in Canada at present comprises some rates below the Intermediate Tariff and otherwise the actual Intermediate Tariff as established under the 1922 Franco-Canadian Convention.

Spain as well as having a double schedule tariff had entered into commercial treaties, providing for many rates below her Second (or lower) tariff. Spanish duties are subject to revision every five years under the terms of a law of March 20, 1906. As a preliminary step to the next tariff revision, Spain arranged for cancellation of all her conventional duties effective as from January 1, 1929. At the same time the Second tariff was reduced on many items, in some instances, to the level of the former Conventional rates. At the present time therefore there are no Spanish duties lower than the Second tariff.

Czechoslovakia.—A Convention of Commerce between Canada and Czechoslovakia signed at Ottawa on March 15, 1928, approved by the Canadian Parliament on June 11, 1928, was, by exchange of ratifications, brought into force on November 14, 1928. This Convention provides for exchange of most-favoured-nation treatment in tariff matters between the contracting parties. Czechoslovakia in consequence is accorded the French treaty rates of the Canadian tariff. The customs tariff of Czechoslovakia comprises (1) General Tariff; (2) reduced duties on 54 items (law of June 22, 1926), applicable to treaty countries; (3) reduced rates on numerous items arising out of commercial treaties. Under the 1928 convention the lowest rates in force on any goods are applicable to Canada. The convention is made for a four-year period from the date of going into force and thereafter until terminated by either party

upon twelve months' notice. It supersedes a temporary agreement of January 1, 1927, under which Canada granted Czechoslovakia her Intermediate Tariff in exchange for most-favoured-nation treatment on 71 tariff items and the lower rates on any of another group of 54 items not otherwise included in the agreement.

Seven Favoured-Nation Treaties.—A Canadian Act assented to on June 11, 1928, accepted on the part of Canada certain most-favoured-nation provisions of treaties or agreements existing between the United Kingdom and the following countries: Esthonia (January 18, 1926); Hungary (July 23, 1926); Latvia (June 22, 1923); Lithuania (May 6, 1922); Portugal (August 12, 1914); Roumania (May 11-24, 1923); Serb, Croat and Slovene Kingdom (May 12, 1927). Canada is to grant to these countries as favourable tariff treatment as is accorded to any other foreign state so long as they give to Canada the same tariff advantages as they allow to the United Kingdom. The Canadian tariff concessions to these countries are based on the Franco-Canadian Convention of 1922. The reciprocal concessions to Canada vary in the different countries, depending on their respective tariff systems.

An Esthonian law, effective September 15, 1928, established (1) a Minimum tariff to consist of the basic tariff then in force, together with any existing treaty rates, and (2) a General tariff, 50 per cent higher than the basic tariff. Hungary has in force various conventional rates of duty lower than her general tariff resulting from treaties with other countries. A Latvian tariff composed of a maximum schedule and a minimum schedule (one-third lower) went into force on April 16, 1928. There are also some Latvian treaty rates lower than the minimum tariff. A Lithuanian decree effective October 1, 1928, established a maximum tariff double the ordinary tariff on certain specified items or made some goods dutiable under the maximum tariff which are duty free under the ordinary tariff. The tariff system of Portugal comprises a minimum tariff and a maximum tariff (50 per cent or 100 per cent higher). The Portuguese Government moreover is empowered to increase duties fivefold or fix rates upon duty-free goods in the case of imports from countries discriminating against Portuguese goods. The Roumanian customs system consists of a minimum tariff and a General tariff, 50 per cent higher. The tariff of Jugoslavia (Serb, Croat, Slovene Kingdom) consists of a maximum and a minimum column of duties. The minimum tariff has been reduced from time to time in consequence of concessions granted to particular countries in new treaties. The new trade agreements secure the lowest rates of duty in any of these countries for Canadian goods. The agreements went into force on the following dates: Esthonia, September 1, 1928; Hungary, August 1, 1928; Latvia, July 14, 1928; Lithuania, September 15, 1928; Portugal, October 1, 1928; Roumania, August 1, 1928; Jugoslavia, August 9, 1928.

Cuba.—A one-year trade agreement between Canada and Cuba, which expired on November 22, 1928, was extended for another year, that is to say, until November 22, 1929, unless a permanent trade convention is concluded earlier. Canadian sanction to continuation of the agreement was given by Order-in-Council of December 6, 1928. Under this arrangement Cuba receives the benefit of the Canadian Intermediate tariff and Canada is guaranteed the Cuban General (or normal) tariff, which is one-half the maximum tariff. The Cuban tariff on United States goods in pursuance of a reciprocity treaty of 1902 is lower even than her normal tariff by from 20 per cent to 40 per cent of the duty.

CHINESE TARIFF AUTONOMY

China.—China, whose customs tariff has been controlled by foreign powers for about three-quarters of a century, concluded treaties during the latter half

of 1928 which establish Chinese tariff autonomy. Following these treaties the Nationalist Government of China proclaimed a revised schedule of import duties which were brought into force as from February 1, 1929. The new ad valorem rates range from 7½ per cent to 27½ per cent, replacing a uniform tariff of 5 per cent ad valorem, but which had been increased by charges levied on goods passing from one Chinese province to another and in recent times by surtaxes.

The tariff relations of China with the outside world formerly depended on the Treaty of Nanking signed with Great Britain in 1842, and the Treaty of Tientsin, arranged in 1858 with Great Britain, the United States, France, and Russia. Under these treaties 5 per cent ad valorem was the controlling rate of the Chinese tariff although some extra taxes (likin) as mentioned were levied internally. The Chinese tariff was reviewed at a Nine Power Conference in Washington in 1922, and again at Peking in 1925, when additions to the basic 5 per cent ad valorem rate were considered but not finally approved. Beginning in 1926, different local Chinese authorities imposed additional duties on imports which were the subject of much discussion as to their validity. A complicated customs situation came to an end with the promulgation of the aforementioned new Chinese tariff.

The first of the Chinese tariff autonomy treaties now in question was signed with the United States at Peking on July 25, 1928, and ratifications exchanged at Washington on February 20, 1929. Belgium, Denmark, Holland, France, Italy, Norway, Portugal, Spain, and Sweden during the period under review gave China similar treaty assurances respecting her customs autonomy. Germany in 1921 had recognized Chinese tariff autonomy, but signed a commercial treaty with her on August 17, 1928, which contains a most-favoured-nation clause, as do all the new tariff autonomy treaties. A treaty with Great Britain removing the old Chinese customs restrictions was signed at Nanking on December 20, 1928, and ratifications exchanged at London on March 14, 1929. In an Exchange of Notes, forming an Annex to the British Treaty, Canada and other British possessions renounce all former treaty limitations regarding the right of China to settle her customs tariff. The Chinese Nationalist Government in these Notes assures products and manufactures of any British Dominion most-favoured-nation treatment so long as China receives from the Dominion in question as favourable treatment as that accorded to any other foreign country.

Dominion Bureau of Statistics

The more important activities during 1928-29 of the Dominion Bureau of Statistics, according to the report of the Dominion Statistician, which operates in several branches and sections, and on which a detailed report is made annually by the Dominion Statistician under section 4 of the Statistics Act, may be briefly summarized as follows:—

POPULATION

The branch on population statistics comprises the decennial and quinquennial censuses, vital statistics, and the compilation of the statistics of immigration. In connection with the former, some special analyses of the 1921 and 1926 censuses were in progress. The usual monthly and annual reports on vital statistics, collected and compiled in collaboration with the Registrars General of the several provinces, were issued,—likewise the monthly and annual compilations relating to the immigration movement, the original returns of which are received and transferred to punched cards by the Department of Immigration. Considerable additional work was thrown on the branch under the Old Age Pensions Act, which requires the bureau, under regulation, to supply certain

information from census records of ages on application from provincial pension boards. The census records back to Confederation have been re-classified and re-numbered to facilitate this work.

AGRICULTURE

The branch on agricultural statistics issued the usual monthly advance statements and reports on the condition of Canadian agriculture throughout the year, through the medium of the Monthly Bulletin of Agricultural Statistics. A census of acreages sown to the principal crops, and of the number of live stock on farms, was taken as of June 15. This and the crop-reporting service of the bureau in general is carried out in co-operation with provincial departments of agriculture. The number of schedules received from individual agriculturists in this connection was well maintained. The branch also compiles and publishes the statistics of agricultural marketing in Canada, both of the grain and fodder crops and of the products of animal husbandry; the usual monthly and annual statistics, including statistics of stocks in cold storage, were issued in this connection.

INDUSTRIAL CENSUS

The annual statistics collected under this heading include all forms of production outside of agriculture, namely, fisheries, furs, forestry, mines, central power stations, construction and general manufactures:

Fisheries, Furs, Miscellaneous Animal Products.—Annual reports were issued on the fisheries of Canada (including both primary operations and the operations of the canneries), trapping, fur farms, dairy factories, and the various branches of manufactures based on animal husbandry, such as slaughtering and meat packing, leather, boots and shoes, etc.

Forest Products Branch.—The usual annual reports on operations in the woods and on saw-milling and pulp and paper manufactures, were brought out; also reports on the various industries using wood or paper as their primary materials.

Mines.—The branch issues a preliminary, half-yearly, and final report on mining operations throughout Canada, also a series of annual reports on the manufactures based on mineral production, including in the latter: (*a*) iron and steel and their products; (*b*) manufactures of non-ferrous metals; (*c*) manufactures of non-metallic minerals; and (*d*) chemical industries. Annual and monthly reports on coal production were issued. The reports in question were in somewhat condensed form as compared with previous years.

General Manufactures.—Some thirty-six bulletins on various industries were prepared and issued, together with several summary reports on the manufactures of Canada and of the several provinces. A special report containing a ten-year review of the textile industry was a feature of the year.

EXTERNAL TRADE

The usual series of annual and monthly trade reports were brought out in this branch, with certain improvements in detail, especially in the "condensed preliminary" annual trade report. The Quarterly Report of the Trade of Canada and the Calendar Year Trade Reports have been bilingualized. The number and scope of special compilations prepared in the branch showed an increase. Some special studies were carried out into the problem of the origin of Canadian imports and the final destination of Canadian exports, in view of existing discrepancies between the trade statistics of the Dominion and the corresponding import and export statistics of other countries.

INTERNAL TRADE

In the prices section of this branch, the index numbers of wholesale and retail prices were changed to a 1926 basis. Some additional analyses were added in security prices, and new indexes for the cost of various services such as street-car, gas, telephone, hospital, etc., were instituted. The bureau's index number of wholesale prices now carries back to 1867. The final report of the Census of Trading Establishments, the materials for which were collected as for 1924, were issued during the year. Further progress was made in the investigation of capital movements into and out of Canada, which has been in progress for some time; the work includes an annual calculation of the invisible items of the trade balance.

TRANSPORTATION AND PUBLIC UTILITIES

The regular monthly and annual reports dealing with steam railways, electric railways, canals, telegraphs, telephones, and central electric power stations were prepared. The weekly carloading report and the monthly summary of traffic reports were somewhat enlarged. An investigation on domestic lighting and commercial power rates for Canada is in progress, also an index number which is designed to show fluctuation in Canadian freight rates periodically.

EDUCATION

The usual preliminary and final annual reports were prepared in this branch in collaboration with provincial departments of education. Some special compilations of the returns were made for the Prairie Provinces, bringing the statistics into line with those of the 1926 quinquennial census.

JUDICIAL STATISTICS

During 1928 this branch prepared and issued its fifty-second annual report on the Criminal Statistics of Canada. Separate treatment is now given to the subject of juvenile delinquency.

LIBRARY

Some useful additions were made to the library during the year and improvements carried out in the cataloguing. The library now contains in the neighbourhood of 45,000 statistical reports of various countries, and a fairly complete series of publications on statistical method.

GENERAL

The Canada Year Book and the Monthly Review of Business Statistics were continued as the main publications of this branch, improvements in detail being made in both. The paid circulation of the Monthly Review is now 1,600.

EXHIBITION COMMISSION

The Exhibition Commission was in the midst of the removal of its headquarters from Ottawa to London, England, at the opening of the fiscal year 1928-29. The commissioner had arrived in March 1928 and taken offices in British Columbia House, 3 Regent Street, London S.W. 1, and pending the erection of a contemplated exhibition building, space was rented for workshops and the storage of exhibition material at Gun Wharves, Wapping.

A program of local exhibitions throughout the British Isles was immediately envisaged, and in close co-operation with the Empire Marketing Board and the Trade Commissioners in the British Isles, the following exhibitions were held during the year:—

April 17-28	Ideal Home Exhibition	Sheffield	Food products.
April 17-26	Grocers and Allied Trades Exhibition	Manchester	Food products.
May 5-12	Olde Englysshe Fayre	London	Food products.
June 11-18	Woking Carnival	Woking	Window display and food products.
July 4-6	Aldershot Command and District Horse Show	Aldershot	Food products and natural resources.
August 18-19	Boscombe Carnival	Bournemouth	Publicity.
Aug. 30-Sept. 12	Bristol's Annual Exhibition	Bristol	Food products and manf. articles.
Sept. 6-8	National Show, Bees and Honey	London	Honey.
Sept. 10-14	3rd Northern Trade Tobacco Exhibition	Manchester	Tobacco.
Sept. 22-28	Grocers and Allied Trades Exhibition	London	Food products.
Oct. 2-13	Better Housing and Housekeeping Exhib	Sheffield	Food products.
Oct. 3-13	Grocers and Allied Trades Exhibition	Aberdeen	Food products.
Oct. 18-19	Portsmouth Empire Fair	Portsmouth	Food products and natural resources.
Oct. 18-20	Empire Fair, Stoke Newington	London	Food products and natural resources.
Oct. 19-27	Imperial Fruit Show	Manchester	Apples.
Oct. 20-Nov. 3	Home and Food Exhibition	Edinburgh	Food products and natural resources.
Oct. 30-Nov. 10	British Empire Exhibtion and Shop Window Display	Cardiff	Food products and natural resources.
Nov. 3-9	Brewers Exhibition	London	Canadian Barley.
Nov. 26-Dec. 1	Cookery and Food Exhibition	Olympia; London	Food products and natural resources.
Jan. 15-24	Birmingham and Midland Grocers, Bakers, Confectioners and Caterers Exhibition	Birmingham	Food products and natural resources.
Feb. 18-Mar. 1	British Industries Fair	London	Food products, tobacco and manf. goods.
Feb. 18-Mar. 1	British Industries Fair	Birmingham	Manufactured goods.
Feb. 26-Mar. 9	Daily Despatch Health and Hygiene Exhibition	Manchester	Food products.
Feb. 26-Mar. 23	Daily Mail Ideal Home Exhibition	London	Food products, tobacco and manf. goods.

At all exhibitions an Assistant Trade Commissioner or a member of the Exhibition staff was in attendance to answer all trade inquiries, and all such inquiries were followed up by the Trade Commissioner in whose district the exhibition was held. Several agencies have been established for goods shown, and a great deal of "consumer" advertising has been done.

Additional to the Government display at the above exhibitions, space was taken by individual firms in the Canadian Section at the following exhibitions:—

British Industries Fair, Birmingham—16 firms.
British Industries Fair, London—39 firms.
Ideal Home Exhibition, London—15 firms.

Despite inclement weather during the period of the British Industries Fair, individual exhibitors have each expressed satisfaction in the results obtained through exhibiting in the Canadian section of these exhibitions. Applications have already been received for space in the Canadian Section for 1930, and allotment will be made when the dates for the 1930 British Industries Fair are fixed. It is hoped, however, when space is offered in the Canadian Section of the British Industries Fair in 1930, that a larger amount will be taken up by Canadian manufacturers. Most of the space this year was taken by the importer or agent in Great Britain.

The larger departmental stores in the Metropolitan area hold periodical displays of Empire produce, and in co-operation with the display managers of

these stores, the Exhibition Commission has endeavoured at all times to make the Canadian display attractive and outstanding by loaning exhibition material, including scenery, grain and fruit in attractive jars, working models, electric signs, etc., to form a background for the produce to be sold. The following stores have taken advantage of this service:—

The Civil Service Supply Association, Ltd., 425, Strand.
The Army and Navy Supply Stores, 118, Praed Street, W. 2.
John Barker & Co. Ltd., High Street, Kensington, W. 8.
Harrods, Ltd., Brompton Road, S.W. 1.
J. Sainsbury (Chain Stores).
James Shoolbred and Co. Ltd. 156, Tottenham Court Road, W.C.
William Whiteley, Ltd., Queens Road, Bayswater, W. 2.

It is hoped to develop this service as much as possible as, though the advertising value is large, the cost is confined to ordinary breakages in transit; delivery and return of the material is made by the firm.

Twenty shop windows outside of London were also supplied with trade advertising and decorative material in connection with their display during the local Empire Week, etc. Advertising, including flags, signs and decorative material was sent to eighty-six bazaars and pageants to set-off Canadian produce sold therein. We have received many requests to supply produce for charitable purposes, but have been unable to comply with them, and in place have sent them decorative material on loan to enhance the display of Canadian produce obtained from other sources.

Preparations were made during the year to take over all agricultural shows from the Immigration Department. In December, 1928, the Exhibition decorators on the staff of the Immigration Department were transferred to the Exhibition Commission staff and control of the warehouse at Liverpool was transferred at the same time. This warehouse will be closed and all material transferred to the new Exhibition building in London early in 1929. Material has been prepared for shop window displays throughout the British Isles and forty-one shop windows, including the Emigration Agents' windows, were decorated throughout the year with grains, fresh fruit, processed fruit and Immigration advertising signs.

Thirty-three schools were supplied with Canadian grain, decorative material and literature advertising Canada.

In November, 1928, the commissioner attended the Diplomatic Conference on Exhibitions held in Paris, as technical advisor to the Hon. Phillippe Roy, Canadian Minister to France. Among others, the following decisions in connection with international exhibitions may be recorded:—

(*a*) An International Exhibition Bureau was created to afford greater protection to countries taking part in exhibitions, as all invitations will be extended through this bureau and the bona fides of proposed exhibitions will be thoroughly investigated.

(*b*) International exhibitions in each country are limited to fifteen-year periods.

(*c*) Charges for space must be within a certain tariff.

(*d*) The ratifying countries agree to exemption from customs duties of all material, whether in the raw state or otherwise, used for exhibition purposes.

It is to be regretted that, owing to difficulties arising regarding the right of way on to the property, and on account of inclement weather, the building of the Canadian Exhibition Building was delayed and possession could not be obtained until the closing days of the fiscal year. The Commission's work was

severely hampered as the temporary accommodation available was not suitable to the large program taken in hand. It is hoped, now that suitable accommodation has been provided, that the work undertaken in the British Isles by the commission will be larger in scope and enhanced in value.

An office was also maintained in Ottawa in charge of a member of our staff, who was responsible for the obtaining and shipping of all goods required by the commission in Canada for use in the British Isles. All accounts in connection with the exhibition work in the United States are passed through this office.

A small warehouse at St. Catharines, Ont., was maintained for the collection of fresh fruits to be despatched to the United States and the British Isles, and to carry on the processing of fruits and vegetables for exhibition purposes. Preparation for the summer shows in the United States is also made at this point, and stands were erected in forty fairs, including state fairs. A number of the agents' offices were renovated during the year.

Under the direction of the Commissioner of Immigration at Winnipeg, five members of the Exhibition Commission staff were employed preparing grains and grasses for exhibition purposes.

Motion Picture Bureau

The Director of the Canadian Government Motion Picture Bureau reports that the last fiscal year has been the most successful in its history.

During the fiscal year under review, the total volume of motion picture film prepared and processed shows an increase of approximately 25 per cent over the total for 1927-28, while the production and distribution of other pictorial material such as still photographs, enlargements, transparencies and lantern slides exceeds the previous fiscal year's production by a like percentage. In addition, there has been a very substantial increase in the volume of special and technical photographic work, both motion and still, during the year.

As in former years, close attention has been paid to the revenue-producing possibilities of the Bureau and, largely due to increased theatrical circulation secured for the Bureau's films, the revenue for the fiscal year has shown a very substantial increase.

The figures for the last three fiscal years are as follows:

Fiscal Year	Total revenue	Increase
	$ cts.	$ cts.
1926-27	15,128 88	.....
1927-28	17,912 06	2,783 18
1928-29	25,883 29	7,971 23

From the foregoing figures it will be seen that the total revenue for the Bureau for the year ending March 31, 1929, showed an increase of approximately 45 per cent over that for fiscal year 1928 and approximately 71 per cent over that for fiscal year 1927.

It is pointed out, however, that while this large increase in revenue demonstrates to some extent the progress made, it is not upon this feature but upon the amount of publicity achieved through the circulation of pictorial matter throughout the world that the value of the Bureau should be judged, since it was for this purpose that it was organized. Revenue is a secondary consideration. The increase in the number and footage of films in circulation, the extension of territories in which films are being circulated and the "coverage" in each territory —i.e., the number of exhibitions in each territory—are the true criteria.

The total number of films in circulation throughout the world at the end of the past fiscal year, according to the Bureau's records, was 2,779, representing approximately 2,223,200 feet, as compared with a total of 1,587 films at the end of the previous fiscal year, representing approximately 1,269 600 feet, or an increase of more than 75 per cent—the largest increase by far in the history of the Bureau. It is estimated that the actual number of exhibitions of the Bureau's films in each territory in which its films are being circulated is about 50 per cent greater than in any previous year.

PRODUCTION AND DISTRIBUTION OF "SEEING CANADA" SERIES

The Bureau has, for some years back, specialized in the production of a series of one-reel films depicting the resources, scenery, attractions and basic industries of the Dominion, which have been circulated throughout the world, both theatrically and non-theatrically. From twelve to twenty of these subjects are released each year and circulation of them has steadily increased.

The schedule below indicates the number of films in circulation in each territory in which the Bureau is operating as of March 31, 1929:

Territory	In Theatrical circulation and revenue-producing	In Theatrical and Non-theatrical circulation, but not revenue-producing
Australia, Tasmania, New Zealand	210 (x)	
Austria and Jugo-Slavia		10
Czechoslovakia		11
Belgium: also circulated in Scandinavian countries		69 (xx)
British West Indies		51 (xx)
Canada	114	280
China		12 (xx)
Cuba		11 (xx)
France	25	15
Germany		45 (xx)
Great Britain, Irish Free State	97	183
Hawaii		12
Holland: also circulated in Scandinavian countries	35	5
India		4
Italy		105 (xxx) (xx)
Japan	4	10 (x)
Norway and Sweden		9
South Africa	40	15
South America	71 (x)	
Straits Settlements, Netherlands East Indies		12 (xx)
United States	88	1,236
Total	684	2,095

(x) Revenue-producing films in theatrical circulation also used for non-theatrical showings.
(xx) Films in non-theatrical circulation also used for non-revenue-producing theatrical showings.
(xxx) Includes 6 duplicate negatives furnished the Italian Government, from which 15 positive prints are made at their expense and circulated through the governmental film organization L.U.C.E.

NOTE.—The above figures do not include many films circulated by agencies of the Canadian railway and steamship companies purchased outright from the Bureau; nor a number of films loaned to such organizations as the Canadian National and Canadian Pacific Steamship Lines and the North German Lloyd for screening during boat trips; nor do they include a large number of 16-mm. films made from negatives for the use of the C.N.R. and other organizations.

DISTRIBUTION OF FILMS IN CANADA

Theatrical.—During the past fiscal year, the theatrical distribution of the Bureau's films showed a remarkable increase. Due to more efficient production methods, and to several contracts subsequently negotiated with large theatrical circuits, the Bureau has been able to increase the number of theatres regularly

showing them by nearly 200 per cent. During the fiscal year the Bureau received regular full-week bookings in over 200 of the most important theatres in Canada from Halifax to Victoria. The revenue from this source, it is estimated, was greater by nearly 100 per cent than ever before.

Non-Theatrical.—The non-theatrical distribution of the films during the past fiscal year also showed a considerable increase due chiefly to the wider use of films for educational, welfare and other purposes and to the greater development of this field by the Bureau.

The non-theatrical distribution of the films in Canada is chiefly handled directly by the Bureau through a library and other facilities maintained for this purpose. Supplies of films are also available through the Ontario Motion Picture Bureau, the National Parks of Canada Branch, the railway companies, commercial film distributors and other organizations to non-theatrical exhibitors in Canada.

DISTRIBUTION IN THE BRITISH EMPIRE

United Kingdom and Irish Free State.—The theatrical and non-theatrical distribution of the Bureau's films in the British Isles increased considerably during the past fiscal year. In the theatrical field, the Bureau was able to negotiate a contract with one of the largest British film distributors that has been instrumental not only in greatly increasing distribution in this territory but also the revenue derived therefrom.

In the non-theatrical field, through arrangements made with the Empire Marketing Board, the Federation of British Industries, the British Empire League, governmental representatives, the agencies of the railway and steamship companies, and other organizations, circulation in the British Isles was also greatly increased.

Australia, Tasmania and New Zealand.—The theatrical distribution in this territory, handled under contract by a large commercial film concern, has shown a substantial increase in number of bookings, coverage and revenue. In the non-theatrical field, good circulation has been secured through the efforts of the Trade Commissioners.

South Africa:—The theatrical distribution in this territory has been satisfactorily increased. It is handled by the largest film concern operating in Africa, the films being purchased outright for distribution. Good non-theatrical circulation has been secured through the efforts of the Trade Commissioner and other governmental representatives.

British West Indies.—The distribution, both theatrically and non-theatrically, in the British West Indies has shown a substantial increase during the past fiscal year. Owing to conditions in the trade in these countries, there is little opportunity of obtaining revenue, but extensive circulation has been secured.

India.—Distribution in India has not as yet reached considerable proportions, owing to the monopoly held by American film interests, but it is expected that, if the recommendations of the Royal Commission which recently investigated the industry in India are carried out, wide circulation for many of the Bureau's films will be secured.

Straits Settlements and Netherlands East Indies.—Through the efforts of the Trade Commissioner of Java, a group of films has, during the past year, been shown in practically every motion picture theatre in this territory.

DISTRIBUTION IN THE UNITED STATES

Theatrical.—The theatrical distribution in the United States has shown a very encouraging increase. A five-year contract for exclusive theatrical dis-

tribution entered into two years previously with Hammond Productions, Inc., of Los Angeles, which had proven unsatisfactory, was amicably terminated and an agreement entered into with The Film Exchange, Inc., of New York—short subject specialists—for the handling of our product. The new arrangements have so far proven very satisfactory in that effective theatrical distribution and a substantial revenue have been obtained, both of which, it is believed, will increase during the coming year.

Non-Theatrical.—At the close of the last fiscal year there were 895 individual films in non-theatrical circulation through 35 agencies. On March 31, 1929, there were 1,236 individual films in non-theatrical circulation through 48 agencies, and in addition a large number more are available and are being used fairly constantly in the offices of the Trade Commissioners and by the agents of the Canadian National and the Canadian Pacific railways. It is estimated that at the end of the fiscal year the number of films in non-theatrical circulation had increased by approximately 40 per cent.

DISTRIBUTION IN OTHER COUNTRIES

The circulation during the past year in foreign countries has shown a substantial increase.

The following is a brief summary of our activities in foreign countries:—

South America and the Caribbean Countries.—The quite extensive circulation in South America, secured through arrangements made the previous year, has been maintained, while there is a decided increase in circulation in the Caribbean countries.

France.—Circulation in this territory has fallen off during the past two years, owing to the enactment of very stringent "quota" regulations and to the fact that the organization which had been handling the product was a short time ago amalgamated with another, handling competitive films.

Germany.—There has been a substantial increase in the non-theatrical circulation in Germany through co-operative arrangements made with the North-German Lloyd Co., the Hamburg-America Line and a number of other organizations using films for promotional work. In addition, through the compilation of special films dealing with Canada, which have been placed at the disposal of a number of well-known German lecturers, extensive publicity has been achieved.

In the theatrical field, owing to the "Kontingent" regulations against foreign films and the fact that distribution is dominated by United States interests, it has been extremely difficult to secure much theatrical distribution.

Belgium, Holland, Denmark, Norway and Sweden.—In so far as film distribution is concerned, these countries are pretty much grouped together. Both the theatrical and non-theatrical distribution has shown a decided increase. A large selection of films has been made available to the "Université Cinematographique Belge," an organization circulating films to several thousand educational organizations in France, Belgium, Holland and Denmark. This institution has undertaken to have them exhibited extensively through these countries. In the theatrical field, distribution is now being handled through a large Dutch film company.

Italy.—Through an arrangement with the Italian Government, a special selection of films has been turned over to the governmental film organization—L.U.C.E.—which has undertaken to have them exhibited extensively throughout the country, both theatrically and non-theatrically. This may be said to be new territory, since the Bureau's films were not distributed to any extent or in any organized manner prior to this fiscal year.

Austria, Jugoslavia and Czechoslovakia.—Conditions in these countries prevent the securing of anything but incidental theatrical showings, but films have been placed at the disposal of governmental, educational and welfare organizations. There was practically no circulation prior to this fiscal year.

China and Japan.—Through arrangements made by Canadian Government Trade Commissioners in these territories, quite a large number of films are being distributed through the theatres and educational institutions in China and Japan.

PRODUCTION AND DISTRIBUTION OF STILL PHOTOGRAPHIC MATERIAL

During the past fiscal year, the activities of the Still Photographic Division have largely increased in scope and extent, while the volume of production, it is estimated, will show an increase of approximately 25 per cent over the previous year. The photographing of official and historic events for the Federal Government and of topical events of international interest, and the distribution of these at nominal charges, are among new developments.

Photographic work has also been undertaken for the Canadian Government Exhibition Commission which during the year was transferred to the Department of Trade and Commerce.

CO-OPERATIVE WORK WITH GOVERNMENTAL DEPARTMENTS AND ALLIED ORGANIZATIONS

Government Departments and allied organizations for which the Bureau has produced motion pictures and still photographic material, on a co-operative basis, during the past fiscal year, include:

Air Services, R.C.A.F.
Canadian Legation, Washington, D.C.
Canadian Legation, Paris, France.
Canadian War Graves Commission.
Canadian National Railways.
Canadian Pacific Railway.
Canadian Government Trade Commissioners.
Canadian Forestry Association.
Canadian Clubs, Association of.
Central Experimental Farm. (12 Divisions).
Chambers of Commerce, British West Indies.
Civil Service Commission.
Department of Agriculture:
- Dairy and Cold Storage Branch.
- Entomological Branch.
- Fruit Branch.
- Health of Animals Branch.
- Live Stock Branch. (7 Divisions).
- Publications Branch.
- Seed Branch.

Department of Insurance.
Department of Immigration and Colonization.
Department of the Interior:
- Secretary's Branch.
- National Parks of Canada Branch.
- Forestry Branch.
- Natural Resources Intelligence Service.
- North West Territories and Yukon Branch.
- Topographical Surveys Branch.

Department of Labour.
Department of Marine and Fisheries:
- Fisheries Branch.
- Fish Culture Service.
- Deputy Minister's Office.
- Hudson Straits Expedition.

Department of Mines:
- Administrative Branch.
- Geological Surveys Branch.
- Mines Branch.
- National Museum.

Department of National Defence:
- Minister's Office.
- Deputy Minister's Branch.
- Historical Section.
- Imperial War Graves Commission.
- Supply and Transport Services.

Department of Public Works.
Department of Railways and Canals.
Department of the Secretary of State.

Department of Trade and Commerce:
- Deputy Minister's Office.
- Commercial Intelligence Service.
- Canadian Exhibition Commission.
- Electricity and Gas Inspection Service.
- Weights and Measures Branch.
- Bureau of Statistics.

Dominion Archives.
House of Commons (Speaker, Sergeant-at-Arms, etc.).
High Commissioner's Office, London, England.
National Council of Women.
Parliamentary Press Gallery and correspondents.
Prime Minister's Office.
Provincial Government of British Columbia.
Provincial Government of New Brunswick.
Provincial Government of Nova Scotia.
Provincial Government of Ontario.
Provincial Government of Quebec.
Poppy Day Committee.

Post Office Department:
- Postmaster-General's Office.
- Secretary's Branch.
- Staff and Publicity Branch.

Patent and Copyright Office.
Railway Commission.
United States Legation, Ottawa, Ont.

PROSPECTS FOR DEVELOPMENT AND EXPANSION

The introduction and extraordinarily rapid growth in popularity of "sound" and "natural colour" films throughout the world, and particularly in the English-speaking countries, presents a serious problem for the Bureau. It is the general opinion in the motion picture industry that, in the English-speaking countries at least, "sound" films will almost entirely supersede "silent" productions in the course of the next year. Advices from distribution agencies indicate that, by the end of the current fiscal year, more than 75 per cent of the theatres in Canada, Great Britain, Australasia, and the United States will be equipped for the exhibition of "sound" pictures, and that there will be no market for the silent product in these territories.

The Bureau has been apprised of the fact that distributors are unable to secure bookings to any extent for its product and already there has been a marked falling off in the exhibitions. The indications are that, unless the Bureau meets the demand of the markets for sound films by undertaking their production, it will lose the bulk of its theatrical circulation. Since this is the chief source of the Bureau's revenue, as well as probably its most important channel for the dissemination of national information, the question of synchronizing the Bureau's films is one of extreme importance.

Technical Films., etc.—In the work of producing technical, instructional and other special films for Government Departments, the Bureau has made great progress. The prospects are that work of this kind will continue to be undertaken to a greater extent in the future, and that the Bureau will actively co-operate with the National Research Council in furtherance of this branch of its activities. It is proposed during the coming year to install additional special equipment for this work.

Other Photographic Material.—The work of the Still Photographic Division has, during the past year, increased considerably both in extent and scope, and prospects are for further developments during the coming year, particularly in the technical and scientific branches.

Publicity

The Director of Publicity of the Department of Trade and Commerce writes that his branch has during the year been engaged in a variety of activities, the majority of which were aimed at the expansion of Canadian export trade. In this connection the columns of daily and weekly newspapers, financial publications, trade journals and magazines were utilized. With respect to the daily newspapers, the financial publications and several magazines, two advertisements were placed during the year, and in the weeklies one advertisement was placed. These displays were designed to show the opportunities offering for export markets throughout the world. With respect to the trade journals, a selection was made of those representing industries engaged in or interested in the exportation of Canadian products, and in these ten insertions were placed during the year.

In connection with all the advertising placed in the various publications, there has been a gratifying editorial reaction, generally indicative of a desire on the part of the publications in question to co-operate in this effort to create an export consciousness and to stimulate Canadian export trade. The campaign, which was after all an experiment, has proven satisfactory and will be continued during the coming fiscal year with certain expansion of the list so far utilized. In all cases the advertising of the branch has emphasized the services to Canadian exporters through the Commercial Intelligence Service and the Canadian Trade Commissioners.

During the first year of the existence of this branch, a considerable amount of advertising and publicity was conducted by it in various publications in the United Kingdom and a large amount of free reading matter was sent to these. With the appointment of a Director of Canadian Trade Publicity in Great Britain, this work is naturally reverted to his branch. It may be said, however, that there is a growing desire, on the part of overseas publications, for material dealing with Canadian trade and industrial conditions. The same is true of Canadian publications and of various publications in the United States.

On May 1, 1928, a contract was entered into between the Department and Reuter's Ottawa Bureau for the preparation of a weekly mail service to at least 100 of the principal papers of Central and South America, Mexico and Cuba, aggregating at least 50,000 words annually, at a cost of $6,000 per annum. This service was designed to promote and maintain in Latin-American countries interest in Canada and Canadian activities, commercial, financial and industrial. During the nine months from the beginning of May, 1928,

to the end of January, 1929, a regular weekly mail service has been given to some 130 newspapers published in Spanish in those countries, and also to 12 papers published in English. To the papers published in Spanish, the mail items have been sent in Spanish. In addition, during the last five months copies of all items sent by this new service have been mailed to all the Canadian Trade Commissioners in the countries referred to. This service supplements the cable service sent by Reuters direct from London, which includes special items of Canadian news received from Canada by cable and requiring prompt transmission.

The publicity secured has exceeded expectations. A considerable number of the newspapers in Cuba, Peru, Bolivia, Brazil, Chile and the Argentine and other countries have been publishing the weekly mail letters from Canada in full. These letters deal succinctly with Canadian news in general and particularly with Canadian trade developments having a bearing on mutual trade interests.

Hitherto the only news of the North American Continent going to Latin-American papers has been via United States sources, and Canada was scarcely ever mentioned. The new service offsets to a large degree the continual permeation in recent years of the Latin-American press by United States news to the exclusion of Canadian news, and thus provides a stimulus to the development of Canadian trade in a great potential market.

The contract provided for 50,000 words annually. Up to the end of January, 1929, and covering a period of nine months the wordage sent by mail was 49,683. On this basis the twelve months' service will exceed contract requirements by nearly 50 per cent.

It is stated that a considerable number of trade inquiries are directly traceable to the news service.

During the year the Director of this branch acted as Secretary to the Committee of Council on Publicity and Advertising. This committee has assembled from time to time, and is of great assistance in deciding questions of policy with respect to the subjects for the consideration of which it was created.

While it is difficult to estimate actual expenditures during the year, it may be stated that out of the $50,000 appropriated to the branch, the great bulk was spent in legitimate advertising, the cost of administration being comparatively small.

Trade Publicity in Great Britain

The Director of Trade Publicity in Great Britain writes that at the beginning of the fiscal year offices were rented at British Columbia House, 3 Regent street, London S.W. 1, on the same floor as the offices occupied by the Canadian Government Exhibition Commission, an arrangement which facilitates close co-operation between the two branches.

Exhibitions.—One of the first important tasks to be undertaken was to obtain adequate publicity for the Canadian displays at the various exhibitions in which Canada was officially taking part. Attention was drawn to Canadian displays in the leading cities of the British Isles by press advertising, by photographs, and by simple competitions designed to attract the interest of the public, and in view of the gratification at Canada's decision to participate in these exhibitions a large volume of press publicity was secured.

EMPIRE WEEK

In Empire Week Canada, in conjunction with the Empire Marketing Board, offered valuable prizes in the shape of artistically designed shields of Canadian maple wood and silver in connection with an Empire Window Dressing Competition held in the Greater London area. A not altogether satisfactory number of entries was received, but the entries received from the larger departmental stores were most gratifying.

CO-OPERATION WITH RETAILERS

During the year an arrangement was entered into with one of the leading departmental stores in London under which a permanent Canadian display was arranged and all Canadian products featured. In this connection the heads of the organization made a special trip to Canada to purchase goods. The result of this arrangement has been that throughout the whole of London a considerably wider variety of Canadian goods is being stocked by the larger groceries. Over 9,000 hampers valued at approximately £1 each were sold through the organization referred to, and sales still continue.

BRITISH EMPIRE EXHIBITION, CARDIFF

Canada's participation in the British Empire Exhibition, Cardiff, in 1928 was noteworthy. On Canada's official day at this exhibition arrangements were made for the Hon. James Malcolm to address a gathering of some thousands of people assembled there, from his desk at Ottawa, by means of the transatlantic telephone. The Minister's speech, which was amplified in a large hall, was heard with astounding clearness, and the event was the focal point of a great volume of publicity. Canada's participation in this exhibition has enabled importers of Canadian produce to make good progress in Cardiff and South Wales generally.

APPLE CAMPAIGN

The most important practical advertising undertaken during the year was the institution of an apple campaign during November, when occurs the shipment of early apples to the British market from Canada. The arrangements for the apple campaign were conducted jointly by Mr. J. Forsyth Smith, Canadian Government Fruit Trade Commissioner, and the Publicity Branch. The campaign was concentrated on Lancashire, Yorkshire, and South Wales, and to a lesser extent upon the rest of Great Britain. Every retail fruiterer in Great Britain was offered supplies of attractively coloured window display material advertising Canadian apples, and a supply of booklets forming the means of entry to a competition with prizes valued at £300. The response was great and over 2,000,000 copies had to be printed. The object of the campaign was not only to sell in bulk Canadian apples, but to educate the public to ask for Canadian varieties by name. This object in the opinion of the trade was achieved.

CANADIAN CALENDARS

A calendar was prepared and made available to the Trade Commissioners, consisting of twelve leaves, printed on Canadian paper and on each leaf an illustration of the Canadian activity appropriate to that month. This distribution was signally successful and the demand was so great that it was impossible to supply it. The Trade Commissioners were unanimous in agreeing that the distribution of the calendar secured for them valuable goodwill. In addition, considerable publicity was secured in the press.

ADVERTISING ON CONTRIBUTORY BASIS

The most disappointing feature of the year was the poor response of Canadian producers to the offer of the Department to put up dollar for dollar with any Canadian producer for a fund for advertising any specified Canadian products. Little enthusiasm was shown as regards this offer, most of the producers or their agents hesitating to spend any money upon advertising. Only very small arrangements of this kind were effected.

SHOP WINDOW DISPLAYS

Probably the most successful work this branch has undertaken during the year has been the encouraging of retailers, mostly fruiterers and grocers, to give, free of charge, window displays of Canadian products. While of course in the ordinary run of business certain Canadian products are shown in shop windows, this section of the report deals only with whole windows of Canadian products specially shown in conjunction with the various activities of this branch and the Exhibition Commission. In all districts where exhibitions have been held, every effort has been made to induce the retailers to use the exhibition as an occasion to feature Canadian products. The normal length of time given by the retailer to a display of Canadian products is one week, and while it is impossible to give the precise number of displays made, it is reasonably sure that no less than 3,000 grocers' windows have been devoted for one week to Canadian products during the year and over 4,000 fruiterers featuring Canadian apples last autumn. When it is borne in mind that it is the practice in Great Britain for retailers to rent their windows at prices ranging from £2 to £100 weekly per window depending upon location, the results secured are most gratifying.

Board of Grain Commissioners for Canada

MOVEMENT AND HANDLING OF 1928 WESTERN CANADIAN GRAIN CROPS

An abundance of subsoil moisture from the previous fall and winter with generous rains and brilliant sunshine during the growing season were of material assistance in the production in 1928 of the largest wheat and barley crops ever harvested in the three Prairie provinces, according to the report of the Board of Grain Commissioners. Unfortunately, however, the yield and grading were more or less seriously affected by the heavy frosts around August 20 and 21, which seriously damaged all grains not sufficiently ripe to be out of danger. That this meant a large proportion of the wheat, most of the oats and a fair quantity of the barley, was later proved by the grading of these grains. The work of the inspectors was further complicated by the fact that germination had been uneven in many parts of the earlier districts and parts of the same fields were ripe, whilst other parts were green when the frost came, and no attempt was made to separate the frozen, unripe grain from the ripe during harvest.

The weather from late August until the winter set in was as nearly ideal for the harvesting, threshing and delivery of the crops as it could be, the rainfall being negligible. Never before were farmers so well equipped to handle the work expeditiously. Around 5,000 combine harvesters were estimated to have been available and an enormous number of auto trucks were used to haul the grain to the local elevators with greater expedition than ever before.

The result of this was a severe test of the capacity of the railways to haul the grain to the lakehead and Pacific terminals, which was essential if the country elevators were to be enabled to keep storage space available for the continuous stream of deliveries. Every previous record in the handling

process was broken, and in spite of the enormous increase in storage space at important handling points between the country and the seaboard, most elevators were taxed to the utmost to provide space for storing what grain was not immediately shipped. The pressure extended even to United States Atlantic ports, and one of these obtained the use of a number of Shipping Board vessels, then lying idle, in which to store several million bushels of Canadian wheat until the ocean steamers arrived which were chartered to carry it.

Fortunately a brisk demand from importing countries continued until the close of the year 1928, when offerings of Argentine and Australian wheat crops commenced. Apparently European importers were buying more heavily, particularly as supplies of feed grains were not so plentiful as usual and low-grade Canadian wheat and barley were relatively cheap. In part of China famine conditions prevailed, due to crop failure, and purchases of lower grades of wheat and wheat flour furnished a market for large quantities of wheat and kept at least four large mills in Western Canada continuously occupied until well into 1929, grinding flour for the Oriental market alone.

Largely as the result of the increased movement of grain to the Orient the volume of grain handled through Vancouver elevators will surpass that of previous seasons again this year. The total should exceed 90 million bushels. Handlings via Prince Rupert have been considerably lower this season, but the new elevator at Victoria, opened for business in November, has received wheat 146,618 and barley 46,820 bushels.

At no time during the movement was there a shortage of vessel tonnage, either on the Great Lakes or the ocean. Rates on the ocean were distinctly favourable, but the enormous volume moved on the Great Lakes before the close of navigation, in competition with a heavy ore movement, meant firmer rates during the peak of the movement.

One feature of the greatest importance to the expeditious movement of the crop is the fact that the grain was dry and the weather at harvest time ideal. Undoubtedly much of the cause for complaint as to the quality of the three previous crops arose from the soaking the grain was subjected to in the fields subsequent to cutting and the consequent weakening of the quality of gluten. There is not the same condition this season nor any complaint of poor gluten quality. And in the movement there has been no holding of grain to be dried before it could be shipped.

The following tables indicate (*a*) the total quantities of wheat and other grains received at principal terminal points during the eight months of the crop year (ended March 31, 1929); and (*b*) the number of cars of new wheat and percentage, grading into each of the principal grades during the first eight months of the crop year as compared with the same period of the year previous.

(A) TOTAL RECEIPTS AT TERMINAL POINTS IN THE WESTERN GRAIN INSPECTION DIVISION AUGUST 1, 1928, TO MARCH 31, 1929

	Wheat	Other grains	Total
	Net bus.	Net bus.	Net bus.
Fort William-Port Arthur	267,637,461	64,400,807	332,038,268
Vancouver	80,003,118	1,396,869	81,399,987
Victoria	143,589	46,820	190,409
Prince Rupert	2,499,393	1,654	2,501,047
Canadian Government Interior Terminal Elevators—			
Calgary	3,656,767	197,754	3,854,521
Edmonton	2,743,464	330,321	3,073,785
Moose Jaw	3,678,491	153,371	3,831,862
Saskatoon	3,419,014	82,111	3,501,125

(B) GRADING OF NEW CROP WHEAT INSPECTED TO THE END OF MARCH, 1929, AS COMPARED WITH THE SAME PERIOD A YEAR AGO

	1928		1927	
1 Manitoba Northern	3,886 cars or	1·44%	2,480 cars or	1·07%
2 " "	34,407 "	12·74%	19,633 "	8·46%
3 " "	56,032 "	20·75%	52,871 "	22·79%
Number 4	55,911 "	20·7 %	28,012 "	12·08%
Total contract grades	150,236 "	55·63%	102,996 "	44·4 %
Number 5	49,079 "	18·17%	10,516 "	4·53%
Number 6	45,421 "	16·82%	5,835 "	2·52%
Feed	17,600 "	6·52%	2,215 "	·96%
No Grade	4,658 "	1·73%	108,661 "	46·84%
Others	3,063 "	1·13%	1,739 "	·75%
Total, other than Durum	270,057 "	100·00%	231,962 "	100·00%
1 C. W. Amber Durum	158 "	·95%	10 "	·1 %
2 " "	3,166 "	18·93%	775 "	7·75%
3 " "	7,070 "	42·27%	3,433 "	34·35%
4 " "	2,907 "	17·38%	457 "	4·57%
Other Durum	3,424 "	20·47%	5,320 "	53·23%
Total, Durum	16,725 "	100·00%	9,995 "	100·00%

Weights and Measures Inspection Branch

The Director of Weights and Measures reports that the Weights and Measures Inspection Service maintained for the year ending March 31, 1929, the same steady growth and development that has characterized this Service for the past nine years.

Compared with the year 1927-28, the revenue and expenditure are as follows:—

	1927-28	1928-29	Increase
Revenue	$ 362,242 81	$ 399,308 06	$ 37,065 25
Expenditure	317,664 55	326,773 18	9,108 63
Surplus	$ 44,578 26	$ 72,534 88	$ 27,956 62

The point of interest in the above figures is the increase in revenue (additional inspection work) of $37,065.25 for an increased expenditure of $9,108.63. That is to say, the average inspector is finding more inspections to do per day and per mile travelled; that the ratio of productive time to unproductive is increasing. This is also affirmed from the ratio of operating expenses to revenue, which for 1928-29 stands at 82 per cent, whilst for the year preceding it was 88 per cent and for 1926-27, 90 per cent.

The mileage travelled during the year totalled 340,607 as against 297,442 for the year preceding, showing an increase of 43,165 miles.

The surplus of revenue over expenditure has now reached a point beyond which it should not continue to increase, and steps will be taken to absorb a greater share of the cost of carting and transporting inspection equipment and so reduce the cost of inspection to the trader.

But against the surplus there are two items of expense, chargeable to the Weights and Measures Service although not paid out of the Weights and Meas-

ures vote, viz., the salary item for the Weights and Measures Standards Branch (the Director's office) totalling $21,630, and the rentals and overhead for the District offices, the first item being paid out of the Civil Vote and the latter by the Public Works Department.

The following table gives a statistical statement of the weights, measures, weighing and measuring machines inspected during the year:—

Articles	Submitted	Verified	Rejected	Per cent of rejection
Weights (Dom.)	86,138	83,939	2,199	2·5
Weights (Metric.)	1,278	1,249	29	2·2
Measures of capacity (Dom.)	105,594	105,297	297	0·28
Measures of length	9,729	9,668	61	0·6
Milk Cans	74,550	74,436	114	0·15
Ice Cream containers	56,197	56,197	–	–
Measuring devices	39,209	35,875	3,424	8·7
Tank wagons	1,313	1,309	4	0·3
Babcock glassware	37,958	37,671	287	0·7
Weighing machines	188,240	169,830	18,410	9·7
Weighing machines (metric)	477	461	16	3·3
	600,683	575,932	24,841	–

The above table does not include the thousands of milk bottles or the glass bottles now being used in garages and filling stations for the sale of oil, but both types of bottle are carefully supervised and checked by selective inspection throughout the country to see that they are correct within the tolerances allowed by the regulations.

The figures for measuring devices (that is, chiefly gasolene dispensers as familiarly seen at filling stations) only show an increase of 4,433 machines over last year, which is practically a 50 per cent understatement. This is due to the development of what is known in the trade as a "Twin" 10-gallon machine—that is, the mounting of two 10-gallon graduated glass chambers on one pedestal, one of these duplex machines doing duty for two of the old-style single bowl pedestals. Actually there has been an increase of over 8,000 complete machines, which the "Two-in-One" idea has reduced statistically to half that figure.

During the year, twenty-three new machines and modifications of existing machines were submitted to the Weights and Measures Standards Branch for examination and approval. Of these, twelve were approved and six rejected, whilst five were given provisional approval subject to accuracy of performance under service conditions.

Statistics, by districts and by provinces, covering the variety of inspection work done, together with a complete financial statement covering both expenditure and revenue, will be found in the separate Annual Report of the Weights and Measures Service.

Electricity and Gas Inspection Branch

The following is a comparative statement concerning the activities of the Electricity and Gas Inspection Branch for the two years ending March 31, 1929, furnished by the Director of the Electricity and Gas Inspection Branch:—

	1927-28	1928-29
Electricity and Gas Inspection Acts—		
Electricity meters tested	293,325	324,998
Gas meters tested	122,684	134,161
Total meters tested	416,009	459,159
Revenue—		
Electricity inspection	$ 189,581 45	$ 212,251 65
Gas inspection	85,715 60	92,447 90
Total revenue	$ 275,297 05	$ 304,699 55
Expenditure—		
Electricity inspection	$ 146,189 40	$ 143,790 81
Gas inspection	52,839 44	60,036 70
Total expenditure	$ 199,028 84	$ 203,827 51
Electricity and Fluid Exportation Act—		
Revenue—		
Export tax	$ 373,676 21	$ 351,108 78
License fees	675 00	675 00
Total revenue	$ 374,351 21	$ 351,783 78
Expenditure—		
Travelling expenses	$ 440 59	$ 283 81
Total revenue for branch	$ 649,648 26	$ 656,483 33
Total expenditure for branch	199,469 43	204,111 30
Surplus	$ 450,188 83	$ 452,372 03

With regard to the Electricity and Gas Inspection Services, this statement shows an increase for the past year over the previous year in every respect. There is an increase of 43,150 in the total number of meters tested, an increase in revenue of $29,402.50, and an increase in expenditure of $4,798.67. The total surplus of revenue over expenditure for the past year amounts to $100,892.04, being an increase of $24,603.83 over the year previous.

GAS INSPECTION SERVICE

The work in connection with this service continues to increase. The number of meters tested was 134,161, an increase of 11,477 over the year 1927-28. There was an increase in the number of new meters presented for verification of 3,116.

The number of meters in use on March 31, 1929, on manufactured gas was 504,500, an increase of 22,067 over the previous year. The number of cubic feet of manufactured gas sold during the year was 16,922,023,500, an increase of 867,187,500. There were 3,428 calorific tests made during the year throughout the Dominion, and the average heating value was found to be 495·4 B.T.U's per cubic foot. The standard is 450 B.T.U's per cubic foot.

The production of natural gas continued to increase at a very rapid rate during the past year, 25,491,446,000 cubic feet having been supplied, an increase of 5,141,446,000 cubic feet or approximately 25 per cent. The number of meters in service on March 31, 1929, measuring natural gas was 107,504, an increase of 8,589.

ELECTRICITY INSPECTION SERVICE

The work connected with this service also continues to grow. During the past year 342,998 meters were tested, an increase of 31,673 over the previous

year. The number of new meters increased from 95,496 to 114,795, and the total number of meters in service on March 31, 1929, was 1,499,966, an increase of 77,400.

During the year just closed two prosecutions were instituted for infractions of the Electricity Inspection Act, one against a contractor in Saskatchewan for failing to register, and the other against a man in Quebec for tampering with a meter while in service. Convictions were obtained in both cases.

ELECTRICAL AND GAS STANDARDS LABORATORIES

The work performed in the laboratories at Ottawa, Winnipeg and Vancouver is most important and consists mainly of two things, namely, the checking of the Inspection Standards supplied to the various districts throughout the Dominion, and the testing and examining of meters presented for approval for use in Canada. The work in connection with the checking of the Inspection Standards is particularly important as a certificate based on the reading of these instruments takes precedence over any other similar certificate. The working standards maintained in the laboratories for checking the Inspection Standards are periodically checked against the Primary Standards. The Primary Standards in the Ottawa Laboratory are recognized as the Electrical Primary Standards for Canada and will continue to be so recognized until such time as the National Research Council provides a laboratory for their maintenance.

During the past year 124 rotating standards, 53 wattmeters, 29 voltmeters and 15 ammeters were checked for our own inspection service, and for outside companies and other departments of the Government 23 rotating standards, 20 wattmeters, 11 voltmeters, 13 ammeters and 14 incandescent lamps were checked.

In connection with the approval of meters for use in Canada, 23 electric meters and 3 gas meters were examined and tested, of which 8 electric meters and 1 gas meter were approved.

EXPORTATION OF ELECTRICAL ENERGY

During the past year the number of kilowatt hours produced for export was 1,604,212,276, a decrease of 70,643,731 kilowatt hours from the preceding year. This decrease is equivalent to 10,810 horsepower years. The revenue collected by virtue of the export duty was $351,108.78, a decrease of $22,567.43, and the expenditure amounted to $283.81.

MAIL SUBSIDIES AND STEAMSHIP SUBVENTIONS

The expenditure on mail subsidies and steamship subventions during 1928-29, according to the Secretary of the Department, totalled $1,026,375.14, as against $844,593.01 in 1927-28, an increase of $181,782.13.

This amount was divided as follows:—

Services on the Atlantic Ocean	$ 224,999 92
Services on the Pacific Ocean	130,183 25
Local Services—	
(a) Interprovincial Services—	
(1) Between Quebec and New Brunswick	3,000 00
(2) Between Quebec, Prince Edward Island and Nova Scotia	50,000 00
(3) Between Nova Scotia and Prince Edward Island	35,000 00
(4) Between Nova Scotia and New Brunswick	49,764 46
(b) Provincial Services—	
(1) British Columbia	93,800 00
(2) New Brunswick	30,500 00
(3) Nova Scotia	180,056 72
(4) Ontario	10,999 98
(5) Prince Edward Island	5,000 00
(6) Quebec	208,563 27

In addition to these amounts, $4,507.54 was expended in the inspection of subsidized services in Quebec and the Maritime Provinces.

The increase referred to above is partly accounted for by the establishment of the following new subsidized services:—

1. *Eastern Canada and Brazil, Uruguay and the Argentine.*—The extensive tour, undertaken by the Deputy Minister through the various countries of South America in 1927, indicated unmistakably the need for better steamship communications between Canada and those countries. The countries on the East Coast offered the most favourable trade prospects to begin with, and a contract was therefore entered into with the Canadian Government Merchant Marine, Limited, who undertook to supply a monthly service from Montreal in the summer, and Halifax or St. John in the winter, to a port or ports in each of the above-mentioned countries.

The service commenced in June, 1928, and promises to be an important factor in the development of Canadian export trade with these Southern countries.

The available statistics for the seven months ended December 31, 1928, show that seven voyages were made, carrying 19,134 tons of Canadian goods. Since the beginning of 1929 the trade on this route has improved, and full cargoes have recently been carried both ways. The southbound cargoes consist of miscellaneous goods of all kinds, including automobile tires and tubes, automobiles, trucks, rubber belting, agricultural implements, phonographs, furniture, newsprint and writing papers, refrigerators, canvas shoes, sewing machines and other commodities. Canadian exporters therefore now have an excellent opportunity to obtain a foothold in these countries, which together import over 70 per cent of the total imports of South America. There is a chain of Canadian banks encircling South America, a regular steamship service is now firmly established, and Canadian Government Trade Commissioners are located at the principal commercial centres, Buenos Aires and Rio de Janeiro. Every facility is thus offered to the Canadian producer.

(2) *Murray Bay and the North Shore of the River St. Lawrence (winter service).*—This service was established in December, 1928. After tenders had been called for, the offer of the Clarke Steamship Company of Quebec was accepted, and a contract drawn up for a service twice a month during the winter season between Murray Bay and from nine to eighteen ports on the North Shore, at a subsidy of $32,900 for four months' service.

The new service proved to be of great utility to the inhabitants of the North Shore, who were formerly without any means of communication, except by dog teams, throughout the long winter months. Eight trips were made, carrying 1,507 passengers, 420 tons of freight, 73 live stock, and 2,328 bags of mail. The prospect of a regular winter steam service on this isolated coast will do much to encourage the development of trade there.

The sum of $35,000 was provided in the estimates as a subsidy for a steamship service between Canada and Newfoundland, conditional upon the satisfactory completion of a trade agreement between the two countries.

The subsidy for the Canada-South Africa service, which formerly stood for many years at $146,000, and was reduced to $125,000 in 1925, and again to $100,000 in 1926, was restored to $125,000 in 1928-29 in order to assist the contractors, Messrs. Elder-Dempster and Co., Ltd., to carry on the service in the face of somewhat adverse conditions, including the competition of services from New York, subsidized by the United States Government, to the extent of $248,280 a year for the South African service, and $311,200 a year for the West African service.

In addition to subsidized voyages, the contractors provided five extra sailings without subsidy during 1928 for the accommodation of shippers, carrying altogether over 70,000 tons of cargo of purely Canadian origin, valued at over $11,000,000, from Canadian ports to ports in South and West Africa.

TENDERS FOR IMPROVED SERVICES

During the year tenders were called for—

(1) *The Charlottetown and Pictou Service.*—A call for tenders was issued on June 20, 1928, resulting in twelve tenders being received, none of which was satisfactory to the Government. Another call was issued on December 7, 1928, when six tenders were received. So far no action has been taken, except to renew the contract with the *Hochelaga* at $35,000 for the season of 1929 as a temporary measure.

(2) *The Mulgrave and Canso Service.*—A call for tenders for a new service to commence on January 1, 1930, was issued on December 15, 1928. Four tenders were received. The contract has been renewed with the *Robert G. Cann* for one more year from April 1, 1928, pending further consideration.

(3) *The Grand Manan Service.*—A call for tenders for a new and improved service on this route, in accordance with the recommendation of the Royal Commission on Fisheries, was issued on June 1, 1928. Four tenders were received, and, by Order in Council of November 15, 1928, the tender of the Grand Manan Steamboat Company was accepted at $33,000 a year for ten years, covering four trips a week all the year round, with a new motorship to be built especially for the service.

(4) *The Pictou-Mulgrave and Cheticamp Service.*—The steamer *Kinburn*, which has been on this route for a number of years, having experienced difficulty in entering certain ports on the West Coast of Cape Breton on account of shallow water, a call for tenders was issued on March 6, 1929, specifying a vessel with a draft of not more than 8½ feet, to commence the service on the opening of navigation in 1929.

Only two tenders were received, neither of which was found to be satisfactory. The contract was therefore renewed with the *Kinburn* for the 1929 season, she being quite a suitable vessel for this service in all respects, except possibly her draft of 12 feet.

CHANGES IN OTHER SERVICES

On the Mulgrave, Arichat and Petit de Grat service, the *Prince Albert* was unfortunately wrecked by ice pressure on March 6, 1929, and became a total loss. She had a very small amount of cargo on board, however, and the contractors, although under no obligation to do so, reimbursed the owners of the goods for their loss, and have since arranged to place a larger and better boat on the route as soon as possible, probably in July, 1929.

The Halifax and Bay St. Lawrence service was improved in 1928, in accordance with the recommendation of the Royal Commission on Fisheries, by providing for trips during the summer months, as well as the spring and fall trips formerly made.

Precious Metals Marking Act

Mr. W. J. Ryan, Inspector under the Preious Metals Marking Act, reports that during the last fiscal year general satisfaction has been expressed by the trade in the administration of the Act, the primary purpose of which is the protection of the public from being imposed upon in the sale of spurious and inferior goods fraudulently marked.

Under the Gold and Silver Marking Act, which was in force until January 1 of the present year, a dealer was permitted to bring into Canada goods made in Europe by what is known to the trade as outdoor workers, in some cases made in reformatories—providing that the goods bore a trade mark, and that such trade mark was registered in Canada.

As a result it became a practice for dealers in this country to register a trade mark in Canada, send it abroad and have it applied to goods manufactured for them in some cases under the conditions mentioned.

With the object of eliminating this unfair competition, the Act was amended to read that if an article brought into Canada had applied to it any mark, it must have applied to it the trade mark of the manufacturer of such article. This amendment prohibits the dealer in Canada from bringing into the country goods made under unknown sources and misleading the trade and public with his Canadian trade mark.

This amendment was greatly appreciated by the manufacturers in Canada.

At the last session of Parliament, however, the Act was further strengthened by an amendment requiring that articles manufactured outside of Canada must have not only the trade mark of the manufacturer but the name of the importer of or dealer in such article, accompanied by the word "imported."

Mr. Ryan reports that there was but one prosecution during the year: a departmental store was brought into Court under Section 11, and fined $25 and costs.

Bounties

Bounty Paid on Copper Bars

During the period JJuly 1, 1927, to June 30, 1928, 12,514,446 lbs. at ½c.	$62,572 24
During the period July 1, 1928, to June 30, 1929, 6,837,124 lbs. at ½c.	34,185 63

Bounty Paid on Hemp

During the calendar year 1927, 203,087 lbs. at 1⅜c.	2,792 43
During the calendar year 1928, 826,821 lbs. at 1¼c.	10,335 25

Revenue and Expenditure

Appended will be found the usual statements of revenue and expenditure of the department for the last fiscal year.

All of which is respectfully submitted.

F. C. T. O'HARA,
Deputy Minister.

REVENUE—DEPARTMENT OF TRADE AND COMMERCE

SUMMARY of the Revenue of the Department for the Services indicated during a period of sixteen years, i.e., April 1, 1913 to March 31, 1929.

Fiscal Year	Canada Grain Act	Canadian Government Elevators	Weights and Measures *(a)*	Gas and Electricity	Electricity Exportation Act *(b)*	Culler's Fees *(c)*	Board of Grain Supervisors	War Trade Board	Canadian Government Motion Picture Bureau	Patent Fees *(d)*	Miscellaneous Revenue	Totals
	$	$	$	$	$	$	$	$	$	$	$	$
1913-14	402,689 87	107,494 14	-	-	-	1,799 40	-	-	-	-	14 78	511,998 19
1914-15	276,711 45	240,323 18	-	-	-	3,114 54	-	-	-	-	896 76	521,045 93
1915-16	469,049 69	444,566 77	-	-	-	1,737 07	-	-	-	-	22,225 09	937,578 62
1916-17	569,772 65	890,038 75	-	-	-	1,554 78	-	-	-	-	2,033 15	1,463,399 33
1917-18	563,266 92	936,608 96	-	-	-	1,342 18	-	-	-	-	26,608 51	1,527,826 57
1918-19	340,545 75	741,523 88	-	-	-	1,229 49	-	-	-	275,708 85	64,458 40	1,423,466 37
1919-20	394,309 77	698,295 82	149,473 43	175,125 27	-	1,272 82	350,000 00	262,469 34	-	354,496 97	152,556 17	2,537,999 59
1920-21	810,952 57	672,325 00	264,218 95	211,828 60	-	2,070 15	-	-	11,917 06	-	93,413 17	2,066,725 50
1921-22	1,133,121 87	804,201 16	269,805 65	221,550 80	-	-	-	-	2,805 27	-	12,690 95	2,444,175 70
1922-23	1,503,616 09	860,421 39	278,259 04	204,420 31	-	-	-	-	16,141 10	-	1,497 67	2,864,355 60
1923-24	1,661,223 84	658,747 21	290,175 30	220,227 05	-	-	-	-	17,090 98	-	3,062 90	2,850,527 28
1924-25	1,446,199 79	876,566 00	293,764 87	216,413 90	-	-	-	-	27,876 79	-	17,288 33	2,878,109 68
1925-26	1,642,054 30	1,043,481 89	315,703 65	247,221 40	288,992 41	-	-	-	22,163 50	-	2,613 96	3,562,231 11
1926-27	1,582,807 21	1,000,176 94	333,034 24	257,724 35	358,072 39	-	-	-	15,129 08	-	16,885 85	3,563,830 06
1927-28	1,718,803 04	959,074 48	361,690 13	275,277 05	374,351 21	-	-	-	17,912 26	327,231 44	5,621 92	4,039,961 53
1928-29	2,179,435 23	807,435 27	399,308 06	304,699 55	351,783 78	-	-	-	25,883 29	-	43,991 83	4,112,537 01
	16,694,560 04	11,741,280 84	2,955,433 32	2,334,488 28	1,373,199 79	14,120 43	350,000 00	262,469 34	156,919 33	957,437 26	465,859 44	37,305,768 07

(a) Prior to September, 1918, the Weights and Measures and Gas and Electricity Services were under the Department of Inland Revenue.
(b) The Electricity and Exportation Act was passed on April 27, 1907, but no export duty was imposed until April 1, 1925.
(c) Cullers Act abolished in 1921.
(d) Patent Office under Trade and Commerce during 1918-19—1919-20; and eight months during 1927-28.

STATEMENT OF EXPENDITURE—DEPARTMENT OF TRADE AND COMMERCE FOR THE FISCAL YEARS ENDED MARCH 31, 1919 TO MARCH 31, 1929

——	1918-19	1919-20	1920-21	1921-22	1922-23	1923-24	1924-25	1925-26	1926-27	1927-28	1928-29
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Civil Government	150,204 05	406,563 34	289,466 27	387,354 97	412,783 00	465,460 86	444,766 24	465,464 14	481,831 75	(g) 633,965 65	543,374 42
Canada Grain Act	598,369 21	617,781 33	654,615 58	868,970 07	953,342 39	1,132,664 10	1,098,288 66	1,149,118 54	1,580,258 40	1,648,562 37	1,856,202 06
Commercial Intelligence	148,574 14	191,896 14	237,688 67	229,246 87	304,859 41	315,686 95	315,032 45	320,837 24	357,415 25	413,294 31	495,183 92
Elevators, Operation and Management	339,152 12	307,815 95	404,949 77	366,029 93	432,812 35	417,016 96	333,501 17	409,029 65	470,271 00	443,046 92	430,384 38
Elevators, Construction and Maintenance	11,562 71	895 00	9,749 51	2,531 18	74,356 95	110,744 96	1,538,052 82	1,775,144 02	379,435 46	370,860 73	16,056 35
Bureau of Statistics	74,754 91	82,517 55	237,483 89	134,697 34	103,857 87	99,081 04	76,150 35	82,413 26	105,293 82	101,892 16	114,609 71
Census	-	-	-	1,664,088 04	259,148 28	158,015 70	40,800 09	-	455,559 24	61,764 34	15,085 04
Research Council (a)	61,130 00	94,507 23	109,577 48	119,563 37	105,210 96	119,810 90	116,213 66	134,996 60	150,000 00	169,998 41	299,745 68
Mail Subsidies and Steamship Subventions	1,391,849 97	1,632,905 80	1,094,508 89	1,105,895 91	1,070,684 08	1,105,086 76	1,055,643 23	1,078,038 10	1,008,998 92	844,590 76	1,026,375 14
West India Cable	38,933 33	33,723 91	34,066 07	38,917 79	38,933 32	38,933 32	19,466 66	-	-	-	-
Weights and Measures Inspection (b)	-	226,851 82	267,909 35	286,165 55	279,855 25	293,715 94	285,041 46	293,193 65	301,437 72	306,194 55	326,773 18
Electricity and Gas Inspection (b)	-	119,474 93	138,000 00	145,145 88	156,702 26	169,672 31	163,072 79	167,028 24	174,461 45	192,298 84	203,827 51
War Appropriation	836,607 23	-	-	-	-	-	-	-	-	-	-
Demobilization (c)	-	1,057,859 25	71,959 63	1,710 46	-	-	-	-	-	-	-
Bounties	270,802 48	352,558 52	149,202 35	100,140 14	95,749 93	79,809 54	72,043 73	31,783 82	164,791 01	82,806 86	79,290 10
British and Foreign News Service	-	-	-	-	-	21,333 34	32,000 00	32,000 00	32,000 00	32,000 00	32,000 00
Exhibitions (d)	-	-	-	-	-	-	-	-	-	38,012 41	295,038 32
Publicity and Advertising	-	-	-	-	-	-	-	-	-	80,941 86	149,890 80
Miscellaneous	69,298 94	632,643 82	55,316 41	559,894 12	354,805 78	730,359 18	283,016 00	191,975 35	165,637 71	286,760 96	243,138 32
	3,991,239 09	(f) 5,757,994,59	(e) 3,754,493 87	6,010,351 62	4,643,101 83	5,257,391 86	5,873,089 31	6,131,022 71	5,827,391 73	5,706,991 13	6,126,974 93

NOTES—

(a) Established in 1918.
(b) Attached to Inland Revenue Department prior to 1919.
(c) No expenditure prior to date indicated.
(d) This amount covers the expenditures from December 1, 1927, to March 31, 1928.
(e) This item was reduced by refunds from the sale of pig iron, amounting to $801,793.91.
(f) The difference between this figure and that shown by the Auditor General's Report is $4,805.39—"Civil Government Salaries," detailed under Health Department.
(g) This amount includes salaries and contingencies of the Patents, Copyrights, and Trade Marks Branch for eight months, April 1-Nov. 30, 1927, totalling $119,626.74.

MISCELLANEOUS for 1923-24 included the following:—

Provisional Bonus Allowance	$ 139,521 81
Printing Parliamentary and Departmental Publications	114,606 39
Royal Commission to inquire into Grain Trade	120,212 01
Canadian Exhibition Train	106,062 74
Japanese Relief	182,369 65
Other Miscellaneous	67,586 58
	$ 730,359 18

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DEPARTMENT OF TRADE AND COMMERCE

OTTAWA, CANADA

HON. JAMES MALCOLM, Minister F. C. T. O'HARA, Deputy Minister

ANNUAL REPORT

OF THE

WEIGHTS AND MEASURES INSPECTION SERVICE

FOR THE FISCAL YEAR ENDING MARCH 31

1929

OTTAWA
F. A. ACLAND
PRINTER TO THE KING'S MOST EXCELLENT MAJESTY
1929

REPORT
OF THE
INSPECTION OF WEIGHTS AND MEASURES

OTTAWA, July 6, 1929.

To the Honourable
The Minister of Trade and Commerce.

SIR,—I have the honour to submit the annual report on the Weights and Measures Inspection Service, together with statistical statements, for the fiscal year ended March 31, 1929.

F. C. T. O'HARA,
Deputy Minister.

Mr. E. O. Way, Director of Weights and Measures, reports as follows:—

The records and returns for the Weights and Measures Service for the year 1928-29 again show that steady increase and development that has characterised the activities of the service for the last nine years.

Compared with 1927-28, the financial standing is as follows, details by districts and provinces being given in Appendix "A".

—	1927-28	1928-29	Increase
	$ cts.	$ cts.	$ cts.
Revenue	362,242 81	399,308 06	37,065 25
Expenditure	317,664 55	326,773 18	9,108 63
Surplus	44,578 26	72,534 88	27,956 62

The above figures show an increase in revenue of $37,065.25, entirely due to the progressive development of the country. Weights and Measures must necessarily keep step with that progress, with the encouraging expectation, however, that as the revenue increases in the aggregate, the individual charge to the owners of weighing and measuring equipment will gradually decrease.

This latter assumption is given substantiation by the fact that the increase in revenue of $37,065.25, as shown above, was accompanied with an increase in expenditure of only $9,108.63. That is to say, the average inspector is finding more inspections to do per day and per mile travelled; that the ratio of productive time to unproductive is increasing. This is also affirmed from the ratio of operating expenses to revenue, which for 1928-29 stands at 82 per cent, whilst for the year preceding it was 88 per cent, and for 1926-27, 90 per cent.

The mileage travelled during the year totalled 340,607 miles, as against 297,442 for the year preceding, showing an increase of 43,165 miles.

As the surplus of revenue over expenditure has now reached a point beyond which it should not continue to increase, steps will be taken to reduce the cost of inspection to the trader by a gradual elimination of the pro rata cartage charge which is levied from scale owners, etc., in addition to the statutory inspection fees, to cover the cost of transporting and trucking the test weights and standards necessary to make inspections. This item last year totalled

$61,677.20, and should further reductions become possible, after this cartage item has been absorbed, the inspection fees themselves can be revised by Order in Council, under the provisions of the Weights and Measures Act.

In connection with the above, however, it should be noted that against the surplus there is chargeable the salary item for the Weights and Measures Standards Branch, the Director's office, totalling $21,630, and the rentals and overhead for the district offices, the first item being paid out of the Civil Vote, the latter being taken care of by the Department of Public Works.

Financial and Statistical Data

The following table gives the financial status of the service for the past nine years:—

—	Inspectors	Expenses	Revenue	Deficit	Surplus
		$ cts.	$ cts.	$ cts.	$ cts.
1920-21	124	307,076 08	267,105 62	39,970 46	.....
1921-22	120	313,982 04	272,137 02	41,845 02	.....
1922-23	119	302,141 58	278,259 04	23,882 54	.....
1923-24	116	312,744 34	290,450 18	22,294 16	.....
1924-25	111	293,030 75	294,106 64	.....	1,075 89
1925-26	111	293,193 65	315,841 14	.....	22,647 49
1926-27	109	301,437 72	333,291 72	.....	31,854 00
1927-28	108	317,664 55	362,242 81	.....	44,578 26
1928-29	110	326,773 18	399,308 06	.....	72,534 88

The following table gives a statistical statement of the weights, measures, weighing and measuring machines inspected during the year, of which a detailed analysis will be found in appendices B and C:—

Articles	Submitted	Verified	Rejected	Percent. of Rejection
Weights.....(Dom.)	86,138	83,939	2,199	2·5
Weights.....(Metric)	1,278	1,249	29	2·2
Measures of Capacity.....(Dom.)	105,594	105,297	297	0·28
Measures of Length.....	9,729	9,668	61	0·6
Milk Cans.....	74,550	74,436	114	0·15
Ice Cream Containers.....	56,197	56,197	.....	.....
Measuring Devices.....	39,209	35,875	3,424	8·7
Tank Wagons.....	1,313	1,309	4	0·3
Babcock Glassware.....	37,958	37,671	287	0·7
Weighing Machines.....	188,240	169,830	18,410	9·7
Weighing Machines.....(Metric)	477	461	16	3·3
	600,683	575,932	24,841	.....

The table does not include either milk bottles or the glass bottles now used for selling oil at filling stations. Both classes of measures, however, are carefully supervised and checked by selective inspection throughout the country to see that correct standards and correct measure are used and delivered.

Apart from these bottle measures, measures of capacity proper show an increase of 11,129, almost exclusively due to expansion in the filling station business.

The figures for measuring devices, i.e. gasolene pumps, visibles, meters, etc., however, do not show the astonishing increase that has taken place in this type of equipment, but merely an advance of 4,433 machines. This small figure is due to the development of a duplex machine, mounting two complete ten-gallon measuring devices on one pedestal. Under modern methods of

trade and exchange, one of these duplex machines takes the place of two of the old type single machines—for a consideration—and so reduces numerical enumeration. A filling station may only mount four pedestals, but actually there are eight 10-gallon individual measuring devices, so that the statistical increase of 4,433 really implies over 8,000 additional machines over last year.

Babcock glassware, i.e. calibrated glassware used in making the butter fat test on milk and cream, shows a shrinkage since 1927 of 12,720 pieces, chiefly due to the displacement of the pipette by weighing, in taking samples of cream, weighing being far more accurate.

The number of bottles and pipettes received for test totalled 37,958, for which the fees amounted to $1,881.20 as against $2,422.35 for 1927-28.

Rejections

The percentages of rejections in the above table are surprisingly small and would seem to reflect upon the effectiveness of the Inspection Service. The fact, however, is that weights proper and counterpoise weights used on platform scales are all adjusted by the inspectors, a service which is also given to weighing machines and measuring devices when such adjustments are within the competence of the inspector, and do not call for machine operations.

Another important factor is the examination and inspection of all equipment before it is sold or delivered either by the manufacturer or importer, a procedure more or less exclusive to Canadian Weights and Measures. In this way a large number of defective and illegal devices are prevented from finding their way into the country to be subsequently gathered up or condemned by the officers on their tours of inspection.

Seizures and Prosecutions

The above observation also applies to the fewness of the seizures. Only 111 seizures of defective and false weights, measures, weighing and measuring devices were made, but numbers of foreign importations were refused entry through the Customs, as being unapproved for use in Canada.

Records of these are unfortunately not kept as the articles do not come into the possession of the officers. Refusal takes place at the Customs and it may be one, a dozen or half a gross of devices are ordered returned to the shipper as not being admissible into Canada.

There were only six prosecutions, four for the sale of short weight and two for the use of unjust machines, convictions being secured in each case with penalties amounting to $37.

Examination—New Machines

During the year twenty-three new machines and modifications of existing machines were submitted to the director's office for examination and approval. Of these twelve were approved and six rejected, whilst five were given provisional approval, subject to performance in service and operation.

Of new measuring devices, interest has centred in the adoption of the meter for every kind of duty in the gasolene and oil trade. This development has introduced some very interesting and perplexing problems for Weights and Measures, and throws an unusually large element of responsibility on the inspectors in the field, since the accuracy of most meters is not merely a property of the meter itself, but may vary as the hydraulic conditions in the pipe line are subject to change. In other words, the accuracy of a meter may be seriously impaired by the lay-out of the installation and the pressure system used.

Meter measurement is the quickest, cleanest and easiest method of measuring and dispensing liquids, and the motor trade has seemingly made up its mind that the meter is to be the next development and fashion, following the old blind piston pump and the modern and ubiquitous "visible".

In the majority of cases, the tendency is for meters to deliver overmeasure, thus favouring the purchasing public. In view, however, of the enormous consumption of gasolene, some 430,000,000 gallons being sold in Canada during 1927, repetitive overmeasure, however small, is of serious import to the distributors, so that here, at least, the retailer has more interest in Weights and Measures inspection than the public.

At full speed, there is little difficulty in calibrating any kind of meter correctly. The danger of overmeasure usually arises when the speed of discharge is greatly reduced and since the whole idea of service is speed, this element of inaccuracy is greatly minimised. At the same time, Weights and Measures, on principle, cannot ignore the presence of this defect and has, therefore, laid down the requirement by regulation, that meters shall measure correctly when operating within the margin of full and half speed, which in practice means at rates of ten and five gallons a minute. Below the latter speed no service is likely to be made and it is not felt to be justifiable that Weights and Measures should withhold approval of an effective device, although not perfect, if it can be made to ensure commercial accuracy within the scope of practical operations.

The manufacturer, to meet this new situation, is bending his research and production activities to the improvement of the meter, and already two or three have been produced in which change of speed has but an infinitesimal effect. Experience is the great teacher, and there is little doubt that before long the resourcefulness of the manufacturer, under the prod of Weights and Measures inspection, will have this meter service standardised on an efficient and accurate basis.

Widening Field of Inspection and the Retailer

In days gone by, Weights and Measures inspection was virtually confined to the retailer, a few railway, coal, and mining scales. To-day the situation is quite changed. There has naturally occurred an expansion and increase in "retail" inspections, but the great expansion in Weights and Measures work is now due to the grain trade of the West, and the distribution of gasolene and related products throughout the Dominion. The retailer, as such, is prone to protest the incidence of Weights and Measures inspection fees, a protest that finds encouragement in the annually increasing revenue totals for the service, and it may not be inadvisable to point out that to-day the revenue from the service of inspection, extended to the two great producing and distributing industries above mentioned, practically equals in amount the sum derived directly from the retailer proper.

Studying the West, the records show an increase in country grain elevators and revenue returns since 1921, as follows:—

	Revenue		Elevators		Increase
	1921	1929	1921	1929	
Manitoba	26,368 10	30,214 20	692	746	44
Saskatchewan	36,768 55	52,852 70	2,184	3,036	852
Alberta	21,058 05	40,966 15	897	1,559	662

The influence of elevator inspection is here quite obvious. Each elevator has at least two large scales, a hopper scale of usually 6,000 pounds, and a wagon scale of from 12,200 pounds to 20,000 pounds, and owing to the expense of transporting standard test weights for these inspections, the fees are relatively high.

The relative stability of the situation in Manitoba shows that the increase in revenue is not at the expense of the retailer.

Alberta, with less increase in elevators, shows a greater expansion than Saskatchewan, which is attributable to the remarkable development in the Peace River district.

Turning to the gasolene situation, these measuring instruments have increased since 1921 from 15,165 to 39,209, many hundreds of the latter, being twin machines, carrying fees as for two 10-gallon machines.

Of the 39,209, some 9,357 are in the three Prairie Provinces. These, with the 5,341 elevators, contribute something like $70,000 of the $124,033.05 total collections above tabled for the prairie west.

Applying the same analysis to Eastern Canada, the records show, for Ontario and Quebec, an increase in revenue from 1920-21 of from $158,513.20 to $235,309.40 for 1928-29.

Of the 39,209 gasolene machines, 22,944 are in the two provinces mentioned, for which the inspection fees would total some $55,000, leaving but a small part of the increase in total revenue chargeable to the retailing community proper.

As the settlement of the country develops and its industries expand, Weights and Measures inspections and revenue must similarly continue to increase, but it is well to note that under the changing conditions of the times, the retailer is no longer the sole contributor to Weights and Measures revenue, and that approximately half the revenue is now derived from the great producing distributing and transporting agencies.

Transportation and Distribution

The transportation and distribution of basic commodities in bulk is presenting an increasingly difficult problem in the field of Weights and Measures work. Great accuracy is now demanded in bulk shipments when the refinements of weighing and measuring available in the retail field are not applicable, except perhaps in the grain trade, where the weighing equipment in both country and terminal elevators is maintained in a very accurate condition and under very strict inspection.

The introduction of motor power for hauling grain is causing the displacement of the old 12,000 pound wagon scale by 20,000 pound machines, and confronting Weights and Measures with the problem of hauling heavier loads of test weights to make these inspections. It requires little imagination to visualize the magnitude of this problem. To the Weights and Measures inspector the vast expanse of the prairies is something more than a geographical expression. It represents the embodiment of thousands of concrete miles that must be traversed on organized progressive inspections and retraversed to pick up again those machines that have been rejected for repairs and adjustments, and such new elevators as are continually being erected at scattered and divergent points. As an illustration, it may be stated that the six inspectors located at Regina, covering the southern half of Saskatchewan, travelled between them 28,879 miles during the year ending March 31, 1929.

Fuel Oil and Gasolene

In the fuel oil trade, new regulations were drawn up and established by Order in Council in 1928, providing for the Government calibration of distributing tank wagons each of which will hold, usually in three separate compartments, a total of from 500 to 1,000 gallons. This inspection was not only approved but welcomed by the several large oil companies, and for once Weights and Measures collects its fee for work done and services rendered without any protest. During the past year some 1,313 tank wagons were so calibrated, four of that number being rejected for constructional weakness.

Coal

Of recent years, the transportation of western coal in carload lots has been giving considerable trouble. Post-war prices have made accuracy proportionately more important and shortages more serious. Unlike grain or gasolene, coal, at the mines, is a relatively low priced commodity and too great a demand for accuracy in loading and weighing, involving as the latter process does much time and labour in switching and shunting in the railway yards, might easily occasion a greater expense and loss than the shortages arising from the rough and ready methods of computing net weight presently in force.

Following complaints of serious shortages in the fall of 1924, and knowing that the errors in complaint could not be attributable to inspected weighing machines, officers of this service in Edmonton and Calgary were directed to arrange with the railways to make a check-weighing of a number of empty freight cars used in coal shipments, since the tare weight stencilled on each car is used as a factor in determining the net load from the gross weight.

The results were surprising. A great percentage of the cars were found to weigh considerably heavier than the tare weight stencilled on them, errors of 1,000 pounds and more being quite common, due to a variety of causes, such as repairs, reinforcing, replaced draw bars and brake beams, and even new trucks, whilst coal dust, refuse and even ice and frozen muck in many cases contributed heavily to these excess weighs.

Some 250 cars were tare weighed in the month of January, 1925, but the figures are too long to table here.

12 cars were found correct.

28 cars weighed less than the stencilled weight by 7,200 pounds or 257 pounds per car.

210 cars weighed more than the stencilled weight by 137,320 pounds or 654 pounds per car.

Since Weights and Measures has no direct control over freight cars, the matter was referred to the Railway Commission, who took the matter up with the railways.

In the winter of 1926 a second check was made, some 149 cars being tare weighed empty.

The results were much better, showing that the railways had been seized with the seriousness of the situation. Only two cars were found over 1,000 pounds in excess of the stencilled weight, and in one of these it was mainly due to frozen coal dust in the car.

Fifty six (56) cars weighed less than the stencilled weight by 19,960 pounds or 356 pounds per car.

One hundred and seventy three (173) cars weighed more than the stencilled weight by 73,420 pounds, or 424 pounds per car.

At a further check in the fall of 1928, one hundred and eight (108) cars were check-weighed and of these, sixteen (16) were correct; twenty-five weighed less than the stencilled weight by 5,800 pounds, or 232 pounds per car; sixty-seven (67) weighed more than the stencilled weight by 19,500 pounds, or 180 pounds per car.

Considering the rough usage to which freight cars are subjected, these last results are rather satisfactory and show a great improvement, indicating that the railways have given the subject of freight cars, used for the shipment of coal, careful consideration as the result of Weights and Measures intervention.

Apart from the correctness of the weight of the empty car, there are many other causes for discrepancies and errors that lie beyond the control of the railways. Of these, climatic conditions are the most serious, rain, snow and ice, all adding heavily to the tare of the car, and liable to be present at the weighing at one point and not at another for the same car. Other causes are leaks and loss in transit, theft and careless unloading, failure to empty car of dust.

Evaporation is also a consequential factor, some coals possessing a high percentage of water and a loss of from one to two per cent is easily possible, that is, a loss of 650 pounds to 1,300 pounds on a shipment of 65,000 pounds.

A complete solution of the situation is difficult to visualize without a large factor of voluntary agreement and compromise as between the Mines, the Railways and the consignees.

Ice Cream

As an interesting contrast to coal, attention has, for sometime, been directed to the sale of ice cream.

Heretofore the wholesale trade has been carried on on a measure basis, but modern methods of manufacture, particularly the practice of producing a light product by a sort of forced aeration, has introduced two disturbing elements, that of inflation, technically known as overrun, and its corollary, shrinkage. Inflation, aeration or overrun, in its effect upon volume, can easily involve a serious element of unfair competition. This suggests as a corrective that ice cream be sold by weight, which, in turn, raises the question of the size of the pound container, which will vary directly as the percentage of overrun.

The solution seems to lie in the establishment of some sort of "food" standards for ice cream, which, however, does not fall within the jurisdiction of Weights and Measures.

Complaint has also been made of unfair competition in the sale of the common and familiar ice cream cone. But here we have sale by the "article" comparable to the sale of a "chocolate bar" and Weights and Measures cannot intervene so long as the "cone" has no value in terms of weight or measure.

Short Weight

Complaints and offences of short weight are increasing. The introduction of pre-weighed goods in chain stores and groceterias seems to be more responsible for this state of affairs than package goods. A great deal of the trouble is due to shrinkage, evaporation, which has full play when goods are taken from bulk and left for hours, perhaps a day or more, on the shelves in warm stores.

Another contributary cause is lack of appreciation on the part of the help of how easily a half ounce or an ounce error can creep into package weighing by lack of exactitude and precision in using weighing machines. Ounce graduations on modern scales are rather small and a slight error at zero balance added to a slight error at the weight mark can very easily make up an ounce. When evaporation supervenes, the error is apt to become 1½ ounces or 2 ounces, and as about 75 per cent of retail sales do not exceed 1 pound in weight, these shortages assume a serious aspect.

The attention of chain store executives has been drawn to the seriousness of this trouble, as a preliminary to the more serious consequence of prosecution, whilst store managers have been forcibly reminded of their responsibilities by widespread check-ups by the inspectors, and circulars from chain headquarters.

The Weights and Measures Act makes it a statutory offence to sell anything short by weight, measure or count and if the trouble persists, the department must perforce resort to widespread prosecutions.

The problem is a difficult one inasmuch as inspectors are only resident in the large cities, but since anybody may sue under the Weights and Measures Act, the interest and co-operation of the local police can be sought to supplement the work of the travelling inspectors of this service. The public are quick to complain, but rarely are they willing to take proceedings or even appear as witnesses. Their purchases, upon which their complaints are made, lack legal

status, so that an inspector must be assigned to make purchases, by which time the offender is usually on his guard; apart from which it is hardly fair to penalize a store manager without more proof than a snap purchase has to offer that short weight is being given with deliberate intent or as a studied practice.

The Service

In conclusion, a word of commendation may be allowable on behalf of those officers whose duty it is to traverse and retraverse this great Dominion, in all weathers, in pursuit of the responsible duties of Weights and Measures inspection. The increasing capacity and variety of weighing and measuring equipment is ever increasing the labour and responsibility involved, and when it is remembered that inspection work brings the officers into direct personal contact with so many different types of personalities, and so many diverse interests, the almost complete absence of complaints, coupled with the progressive expansion and efficiency of the service, must fairly be interpreted as bearing excellent testimony to the industry, competence, tact and good judgment on the part of the officers concerned.

APPENDIX A

STATEMENT of Weights and Measures Expenditure and Revenue for fiscal year ended March 31, 1929

District	District Inspector	Salaries	Special Assistance	Rent	Travel	Sundries	Total	Revenue
		$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
ONTARIO—								
Belleville	F. D. Diamond	9,270 00			4,082 46	452 96	13,805 42	14,850 10
Hamilton	A. E. Wheatley	11,535 00			6,219 84	306 45	18,061 29	24,287 55
London	A. A. Luton	15,241 29	90 00		6,010 14	316 80	21,658 23	22,027 90
Ottawa	E. H. Hinchey	18,555 00			9,953 41	281 18	28,789 59	27,376 35
Toronto	W. A. Fallowdown	16,496 58			5,148 66	362 55	22,007 79	61,411 65
Total for Ontario		71,097 87	90 00		31,414 51	1,719 94	104,322 32	149,953 55
QUEBEC—								
Monteal	A. A. Bernard	22,823 88			10,894 08	405 01	34,122 97	43,400 35
Quebec	J. A. W. LeBel	12,165 00			6,131 15	273 53	18,569 68	16,968 50
Sherbrooke	O. C. Delorme	7,650 00			2,477 24	352 47	10,479 71	16,629 60
Three Rivers	J. A. Desilets	7,515 00			3,062 90	153 04	10,730 94	8,357 40
Total for Quebec		50,153 88			22,565 37	1,184 05	73,903 30	83,355 85
NEW BRUNSWICK—								
St. John	W. F. Balcom	7,540 00			2,211 55	137 34	9,888 89	8,570 70
NOVA SCOTIA—								
Halifax	W. M. Dustan	7,485 00			4,365 62	409 01	12,259 63	10,792 50
P. E. ISLAND—								
Charlottetown	J. E. Trainor (Actg.)	1,860 00			615 28	39 28	2,514 56	2,282 20
MANITOBA—								
Winnipeg	J. B. Attridge	16,215 00			8,453 39	337 53	25,005 92	30,214 20
SASKATCHEWAN—								
Regina	E. B. Lorimer	13,770 00			8,624 19	343 62	22,737 81	26,726 90
Saskatoon	R. Wallace (Actg.)	9,000 00	120 00		7,546 56	278 41	16,944 97	26,125 80
Total for Saskatchewan		22,770 00	120 00		16,170 75	622 03	39,682 78	52,852 70
ALBERTA—								
Calgary	A. E. H. Cable	7,890 00			5,484 75	429 24	13,803 99	18,512 20
Edmonton	John McLeod	9,525 00			6,517 52	267 24	16,309 76	22,453 95
Total for Alberta		17,415 00			12,002 27	696 48	30,113 75	40,966 15
BRITISH COLUMBIA—								
Vancouver	A. H. Dutton	7,860 00		180 00	4,822 53	394 37	13,256 90	13,811 20
YUKON—								
Dawson	R. A. Field	360 00					360 00	106 25
Director, Ottawa	E. O. Way				35 95	138 54	174 49	
Superintendent Eastern Division	D. J. McLean	3,240 00			608 38		3,848 38	
Superintendent Western Division	R. Wallace	3,240 00			468 55		3,708 55	
Elevator Scale Inspector	J. G. White	500 00			58 05		558 05	
Elevator Scale Inspector	A. A. Bowen	660 00			38 85		698 85	
Testers Babcock Glassware		3,060 00					3,060 00	
Total for Districts		213,456 75	210 00	180 00	103,831 05	5,678 57	323,356 37	394,905 30
General contingencies						1,152 56		
Printing general account						876 04		
Stationery general account						961 64		
Government publications						42 50		
International Bureau of Weights and Measures						384 07	3,416 81	
Weights and Measures Laboratory fees								1,881 20
Post Office inspection fees								2,500 00
Casual revenue								24 31
Total expenditure chargeable to Weights and Measures appropriation and total revenue							326,773 18	399,310 81
Less refunds chargeable to Weights and Measures revenue								2 75
							326,773 18	399,308 06
Gratuities Civil Service Act, section 56						350 00		
Printing of parliamentary and departmental publications						738 94	1,088 94	

APPENDIX B

RETURN showing the Number of Weights and Weighing Machines submitted in each Inspection District, during the Fiscal Year ended March 31, 1926

Inspection District	Weighing Machines																Weights				
			Platform Scales				Spring Scales			Computing Scales		Automatic Scales									
	Equal Arms	Steelyard	Ordinary	Pitless	Dial	Track	Trade	Ice and Dairy	Automatic Slot	Spring	All others	Grain Elevator	All others	Suspension Scales	Combined Avoirdupois and Metric	Metric	Avoirdupois	Troy	Metric	Tolerated	Tobacco
Belleville	539	106	3,174	.....	74	12	6	16	43	554	1,294	2	12	5	.....	92	3,021	.....	329	.....	.....
Hamilton	722	4,127	5,538	2	293	51	15	29	36	570	1,647	19	24	10	.....	.....	6,692	8	8	.....	.....
London	559	91	3,568	34	468	26	9	6	157	845	4,714	.....	.....	45	.....	15	3,470	.....	.....	.....	.....
Ottawa	1,357	70	9,720	2	147	32	41	6	26	2,178	1,894	.....	.....	21	.....	13	7,567	.....	9	.....	50
Toronto	1,422	78	3,143	.....	398	23	62	.....	324	2,946	3,954	1	15	22	.....	7	5,769	21	51	12	.....
ONTARIO	4,599	4,472	25,143	38	1,380	144	133	57	586	7,193	13,503	22	51	103	.....	127	26,519	29	397	12	50
Montreal	3,603	727	11,348	53	430	52	146	9	151	2,695	5,601	.....	94	111	14	94	15,924	13	389	216	110
Quebec	1,114	399	4,635	1	32	17	31	.....	6	795	1,426	18	27	2	.....	.....	6,142	.....	182	187	262
Sherbrooke	521	5,330	10,664	38	25	18	9	.....	108	58	1,051	.....	3	6	.....	41	6,798	.....	34	.....	6
Three Rivers	596	180	2,955	4	289	25	17	.....	20	386	504	2	.....	.....	.....	.....	2,950	.....	.....	.....	.....
QUEBEC	5,834	6,636	29,602	96	776	112	203	9	285	3,934	8,582	20	124	119	14	135	31,814	13	605	403	378
St. John, N.B	397	19	1,957	.....	57	21	36	.....	.....	820	973	.....	6	30	.....	.....	2,542	.....	.....	.....	.....
Halifax, N.S	729	101	2,364	.....	72	34	77	1	8	1,212	1,501	6	11	31	.....	.....	3,659	.....	.....	.....	.....
Charlottetown, P.E.I	73	3	743	.....	14	2	10	.....	.....	.....	378	.....	1	5	.....	.....	316	.....	.....	.....	.....
Winnipeg, Man	867	760	6,925	31	343	20	157	42	90	2,367	2,156	15	7	23	5	52	5,187	.....	38	.....	.....
Regina	379	1,201	6,756	15	41	16	16	.....	11	731	1,308	6	.....	1	.....	.....	2,284	.....	.....	.....	.....
Saskatoon	613	1,486	6,785	35	40	9	5	.....	9	898	1,135	6	.....	9	.....	.....	2,628	.....	.....	.....	.....
SASKATCHEWAN	992	2,687	13,541	50	81	25	21	.....	20	1,629	2,443	12	.....	10	.....	.....	4,912	.....	.....	.....	.....
Calgary	404	774	4,177	27	50	32	41	.....	21	675	1,325	76	6	13	.....	10	3,439	.....	18	.....	.....
Edmonton	484	779	5,707	121	82	21	26	36	17	696	1,602	69	.....	7	.....	153	3,859	.....	220	.....	.....
ALBERTA	888	1,553	9,884	148	132	53	67	36	38	1,371	2,927	145	6	20	.....	163	7,298	.....	238	.....	.....
Vancouver, B.C	650	277	3,199	11	73	35	292	.....	43	1,619	1,996	3	11	54	.....	.....	3,006	.....	.....	.....	.....
Yukon, N.W.T	4	3	73	.....	.....	.....	3	.....	.....	.....	10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Totals	15,033	16,511	93,431	374	2,928	446	999	145	1,070	20,145	34,469	223	217	395	19	477	85,253	42	1,278	415	428

APPENDIX B—Continued

RETURN showing the Number of Weights and Weighing Machines Verified in each Inspection District during the Fiscal Year ended March 31, 1929

Inspection District	Weighing Machines																Weights				
			Platform Scales				Spring Scales			Computing Scales		Automatic Scales									
	Equal Arms	Steelyard	Ordinary	Pitless	Dial	Track	Trade	Ice and Dairy	Automatic Slot	Spring	All others	Grain Elevator	All others	Suspension Scales	Combined Avoirdupois and Metric	Metric	Avoirdupois	Troy	Metric	Tolerated	Tobacco
Belleville	506	77	2,142	.....	50	5	6	16	29	470	1,150	2	12	2	.....	87	2,745	.....	307	.....	.....
Hamilton	607	4,098	3,877	1	179	9	6	28	15	441	1,183	19	19	6	.....	.....	5,982	.....	8	.....	50
London	531	67	2,968	20	405	14	6	6	137	705	4,256	.....	.....	43	.....	15	3,393	.....	.....	.....	.....
Ottawa	1,305	58	8,711	2	115	21	36	6	15	1,879	1,681	.....	.....	16	.....	13	7,557	.....	9	.....	.....
Toronto	1,383	75	2,868	.....	356	11	59	.....	289	2,831	3,704	1	15	20	.....	7	5,755	5	51	12	.....
ONTARIO	4,332	4,375	20,566	23	1,105	60	113	56	485	6,326	11,974	22	46	87	.....	122	25,432	5	375	12	50
Montreal	3,305	634	9,682	29	388	43	138	9	131	2,360	4,892	.....	91	97	14	94	15,771	13	389	216	110
Quebec	1,099	385	4,540	.....	32	9	28	.....	6	777	1,381	18	27	2	.....	.....	6,119	.....	182	187	262
Sherbrooke	518	5,319	10,583	35	20	15	8	.....	105	57	1,016	.....	3	6	.....	40	6,798	.....	34	.....	6
Three Rivers	574	161	2,546	4	258	19	17	.....	19	378	472	2	.....	.....	.....	.....	2,948	.....	.....	.....	.....
QUEBEC	5,946	6,499	27,351	68	698	86	191	9	261	3,572	7,761	20	121	105	14	134	31,636	13	605	403	378
St. John, N.B	389	19	1,776	.....	53	17	36	.....	.....	791	943	.....	6	29	.....	.....	2,540	.....	.....	.....	.....
Halifax, N.S	576	59	1,828	.....	57	31	66	.....	4	1,092	1,294	6	9	27	.....	.....	3,198	.....	.....	.....	.....
Charlottetown, P.E.I	73	3	675	.....	14	2	10	.....	.....	.....	371	.....	1	5	.....	.....	316	.....	.....	.....	.....
Winnipeg, Man	846	757	6,418	30	283	14	135	42	82	2,246	2,066	15	7	18	5	52	5,187	.....	38	.....	.....
Regina	363	1,189	6,149	10	39	9	12	.....	9	688	1,227	6	.....	1	.....	.....	2,268	.....	.....	.....	.....
Saskatoon	596	1,471	6,246	28	36	4	4	.....	6	837	990	5	.....	7	.....	.....	2,628	.....	.....	.....	.....
SASKATCHEWAN	959	2,660	12,395	38	75	13	16	.....	15	1,525	2,217	11	.....	8	.....	.....	4,896	.....	.....	.....	.....
Calgary	398	748	3,731	19	41	20	36	.....	20	616	1,248	72	6	12	.....	7	3,425	.....	15	.....	.....
Edmonton	462	766	4,691	71	63	21	21	36	11	634	1,480	67	.....	7	.....	146	3,456	.....	216	.....	.....
ALBERTA	860	1,514	8,422	90	104	41	57	36	31	1,250	2,728	139	6	19	.....	153	6,881	.....	231	.....	.....
Vancouver, B.C	633	262	2,949	11	65	31	272	.....	36	1,481	1,830	3	11	52	.....	.....	2,992	.....	.....	.....	.....
Yukon, N.W.T	4	3	73	.....	.....	.....	3	.....	.....	.....	10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Totals	14,166	16,151	82,453	260	2,454	295	899	143	914	18,283	31,194	216	207	350	19	461	83,078	18	1,249	415	428

APPENDIX B—Concluded

RETURN showing the Number of Weights and Weighing Machines Rejected in each Inspection District during the Fiscal Year ended March 31, 1929

Inspection District	Weighing Machines																Weights				
			Platform Scales				Spring Scales			Computing Scales		Automatic Scales									
	Equal Arms	Steelyard	Ordinary	Pitless	Dial	Track	Trade	Ice and Dairy	Automatic Slot	Spring	All others	Grain Elevator	All others	Suspension Scales	Combined Avoirdupois and Metric	Metric	Avoirdupois	Troy	Metric	Tolerated	Tobacco
Belleville	33	29	1,032	.....	24	7	.....	1	14	84	144	.....	.....	3	.....	5	276	.....	22	.....	.....
Hamilton	115	29	1,661	1	114	42	9	.....	21	229	464	.....	5	4	.....	.....	710	8	.....	.....	.....
London	28	24	600	14	63	12	3	.....	20	140	458	.....	.....	2	.....	.....	77	.....	.....	.....	.....
Ottawa	52	12	1,009	.....	32	11	5	.....	11	299	213	.....	.....	5	.....	.....	10	.....	.....	.....	.....
Toronto	39	3	275	.....	42	12	3	.....	35	115	250	.....	.....	2	.....	.....	14	16	.....	.....	.....
ONTARIO	267	97	4,577	15	275	84	20	1	101	867	1,529	.....	5	16	.....	5	1,087	24	22	.....	.....
Montreal	298	93	1,666	24	42	9	8	.....	20	335	709	.....	3	14	.....	.....	153	.....	.....	.....	.....
Quebec	15	14	95	1	.....	8	3	.....	.....	18	45	.....	.....	.....	.....	.....	23	.....	.....	.....	.....
Sherbrooke	3	11	81	3	5	3	1	.....	3	1	35	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Three Rivers	22	19	409	.....	31	6	.....	.....	1	8	32	.....	.....	.....	.....	.....	2	.....	.....	.....	.....
QUEBEC	338	137	2,251	28	78	26	12	.....	24	362	821	.....	3	14	.....	1	178	.....	.....	.....	.....
St. John, N.B	10	.....	181	.....	4	4	.....	.....	.....	29	30	.....	.....	1	.....	.....	2	.....	.....	.....	.....
Halifax, N.S	153	42	536	.....	15	3	11	1	* 4	120	207	.....	2	4	.....	.....	461	.....	.....	.....	.....
Charlottetown, P.E.I	.....	.....	68	.....	.....	.....	.....	.....	.....	.....	7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Winnipeg, Man	21	3	507	1	60	6	22	.....	8	121	90	.....	.....	5	.....	.....	.....	.....	.....	.....	.....
Regina	16	12	607	5	2	7	4	.....	2	43	81	.....	.....	.....	.....	.....	16	.....	.....	.....	.....
Saskatoon	17	15	539	7	4	5	1	.....	3	61	145	1	.....	2	.....	.....	.....	.....	.....	.....	.....
SASKATCHEWAN	33	27	1,146	12	6	12	5	.....	5	104	226	1	.....	2	.....	.....	16	.....	.....	.....	.....
Calgary	6	26	446	8	9	12	5	.....	1	59	77	4	.....	1	.....	3	12	.....	3	.....	.....
Edmonton	22	13	1,016	50	19	.....	5	.....	6	62	122	2	.....	.....	.....	7	403	.....	4	.....	.....
ALBERTA	28	39	1,462	58	28	12	10	.....	7	121	199	6	.....	1	.....	10	415	.....	7	.....	.....
Vancouver, B.C	17	15	250	.....	8	4	20	.....	7	138	166	.....	.....	2	.....	.....	14	.....	.....	.....	.....
Totals	867	360	10,978	114	474	151	100	2	156	1,862	3,275	7	10	45	.....	16	2,175	24	29	.....	.....

APPENDIX C

RETURN showing the Number of Measures of Capacity, Measuring Devices, Lineal Measures and Miscellaneous submitted in each Inspection District, during the Fiscal Year ended March 31, 1929

Inspection District	Measures of Capacity			Measuring Devices						Lineal Measures		Miscellaneous								
	Dominion	Milk Cans	Ice Cream Containers	S.M. Pumps	Combined Pump and Visible	Visible	Measuring Tanks	Meter Pumps	Meters	Dominion	Metric	Personal Weigher	Moisture Test Scales	Miner's Attachment	Tipple Scales	Weighto-graphs	Totalizers	Salt Carts and Tubs	Fabric Measures	Measuring Bowls	Tank Wagon
Belleville	5,698	.....	.....	639	11	1,150	.....	.....	.....	307	.....	8	.....	.....	.....	1	.....	.....	3	8	22
Hamilton	14,093	.....	.....	679	16	1,403	.....	.....	.....	350	.....	.....	.....	.....	.....	1	.....	.....	7	.....	46
London	8,208	501	1,028	417	13	1,577	.....	.....	.....	2,362	.....	16	.....	.....	.....	1	.....	.....	.....	.....	159
Ottawa	3,967	425	.....	1,034	12	1,551	.....	.....	20	.....	.....	30	.....	.....	.....	.....	.....	.....	33	.....	51
Toronto	29,338	67,441	54,276	1,135	51	8,094	.....	46	321	206	.....	973	.....	.....	.....	.....	.....	.....	183	.....	304
ONTARIO	61,304	68,367	55,304	3,904	103	13,775	.....	46	341	3,225	.....	1,027	.....	.....	.....	3	.....	.....	226	8	582
Montreal	17,469	2,084	.....	1,599	9	1,879	5	.....	.....	1,808	.....	474	.....	.....	.....	.....	.....	.....	74	.....	82
Quebec	9,792	1	.....	677	.....	992	.....	.....	.....	1,660	.....	45	.....	.....	.....	.....	.....	.....	3	16	19
Sherbrooke	1,317	.....	.....	350	2	635	.....	.....	.....	715	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....
Three-Rivers	1,881	.....	893	147	.....	480	.....	.....	.....	250	.....	.....	.....	.....	.....	.....	1	.....	.....	4	2
QUEBEC	30,459	2,085	893	2,773	11	3,986	5	.....	.....	4,433	.....	519	.....	.....	.....	2	1	.....	77	20	103
St. John, N.B	2,016	346	.....	680	5	808	.....	.....	.....	.....	.....	9	.....	.....	.....	5	.....	.....	.....	.....	45
Halifax, N.S	1,900	.....	.....	629	68	842	.....	.....	.....	7	.....	.....	.....	10	.....	.....	.....	21	.....	.....	6
Charlottetown, P.E.I	765	.....	.....	201	3	125	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Winnipeg, Man	2,561	.....	.....	1,327	4	946	.....	.....	.....	817	.....	99	.....	.....	.....	.....	.....	.....	78	.....	225
Regina	849	.....	.....	1,133	.....	881	.....	.....	.....	355	.....	.....	.....	1	.....	.....	.....	.....	7	.....	75
Saskatoon	424	.....	.....	902	14	936	.....	.....	.....	131	.....	2	.....	.....	.....	.....	.....	.....	2	.....	105
SASKATCHEWAN	1,273	.....	.....	2,035	14	1,817	.....	.....	.....	486	.....	2	.....	1	.....	.....	.....	.....	9	.....	180
Calgary	1,506	1,766	.....	605	6	819	.....	.....	.....	228	.....	1	.....	22	.....	.....	.....	.....	12	.....	69
Edmonton	3,000	1,864	.....	900	5	879	5	3	.....	53	.....	.....	.....	3	17	.....	.....	.....	3	.....	51
ALBERTA	4,506	3,630	.....	1,505	11	1,698	5	3	.....	281	.....	1	.....	25	17	.....	.....	.....	15	.....	120
Vancouver, B.C	685	122	.....	947	.....	583	11	.....	19	6	.....	87	.....	6	.....	.....	.....	.....	69	7	52
Totals	105,469	74,550	56,197	14,001	219	24,580	21	49	360	9,255	.....	1,744	.....	42	17	10	1	21	474	35	1,313

APPENDIX C—Continued

RETURN showing the Number of Measures of Capacity, Measuring Devices, Lineal Measures and Miscellaneous Verified in each Inspection District during the Fiscal Year ended March 31, 1929

Inspection District	Measures of Capacity			Measuring Devices						Lineal Measures		Miscellaneous								
	Dominion	Milk Cans	Ice Cream Containers	S.M. Pumps	Combined Pump and Visible	Visible	Measuring Tanks	Meter Pumps	Meters	Dominion	Metric	Personal Weigher	Moisture Test Scales	Miner's Attachment	Tipple Scales	Weighto-graphs	Totalizers	Salt Carts and Tubs	Fabric Measures	Measuring Bowls	Tank Wagon
Belleville	5,623	.....	.....	567	9	947	.....	.....	.....	307	.....	8	.....	.....	.....	1	.....	.....	1	6	21
Hamilton	14,039	.....	.....	599	12	1,169	.....	.....	.....	342	.....	.....	.....	.....	.....	1	.....	.....	7	.....	45
London	8,208	501	1,028	352	8	1,213	.....	.....	.....	2,362	.....	16	.....	.....	.....	1	.....	.....	.....	.....	157
Ottawa	3,963	353	.....	968	8	1,235	.....	.....	19	.....	.....	30	.....	.....	.....	.....	.....	.....	31	.....	51
Toronto	29,338	64,441	54,276	1,125	48	8,030	.....	45	321	206	.....	973	.....	.....	.....	.....	.....	.....	180	.....	304
ONTARIO	61,171	68,295	55,304	3,611	85	12,594	.....	45	340	3,217	.....	1,027	.....	.....	.....	3	.....	.....	219	6	578
Montreal	17,460	2,084	.....	1,479	8	1,581	5	.....	.....	1,808	.....	474	.....	.....	.....	.....	.....	.....	68	.....	82
Quebec	9,729	1	.....	655	.....	954	.....	.....	.....	1,632	.....	45	.....	.....	.....	.....	.....	.....	3	16	19
Sherbrooke	1,317	.....	.....	344	2	605	.....	.....	.....	715	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....
Three Rivers	1,881	.....	893	139	.....	443	.....	.....	.....	250	.....	.....	.....	.....	.....	.....	1	.....	.....	3	2
QUEBEC	30,387	2,085	893	2,617	10	3,583	5	.....	.....	4,405	.....	519	.....	.....	.....	2	1	.....	71	19	103
St. John, N.B	2,016	346	.....	644	5	786	.....	.....	.....	.....	.....	9	.....	.....	.....	5	.....	.....	.....	.....	45
Halifax, N.S	1,848	.....	.....	509	59	804	.....	.....	.....	3	.....	.....	.....	10	.....	.....	.....	21	.....	.....	6
Charlottetown, P.E.I	765	.....	.....	177	3	121	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Winnipeg, Man	2,556	.....	.....	1,261	4	857	.....	.....	.....	817	.....	99	.....	.....	.....	.....	.....	.....	74	.....	225
Regina	845	.....	.....	1,057	.....	833	.....	.....	.....	355	.....	.....	.....	1	.....	.....	.....	.....	7	.....	75
Saskatoon	424	.....	.....	828	14	877	.....	.....	.....	131	.....	2	.....	.....	.....	.....	.....	.....	2	.....	105
SASKATCHEWAN	1,269	.....	.....	1,885	14	1,710	.....	.....	.....	486	.....	2	.....	1	.....	.....	.....	.....	9	.....	180
Calgary	1,504	1,724	.....	580	5	742	.....	.....	.....	228	.....	1	.....	17	.....	.....	.....	.....	12	.....	69
Edmonton	2,980	1,864	.....	790	3	731	5	3	.....	53	.....	.....	.....	3	14	.....	.....	.....	3	.....	51
ALBERTA	4,484	3,588	.....	1,370	8	1,473	5	3	.....	281	.....	1	.....	20	14	.....	.....	.....	15	.....	120
Vancouver, B.C	683	122	.....	767	.....	514	11	.....	16	6	.....	87	.....	5	.....	.....	.....	.....	65	7	52
Totals	105,179	74,436	56,197	12,841	188	22,442	21	48	356	9,215	.....	1,744	.....	36	14	10	1	21	453	32	1,313

APPENDIX C—Concluded

RETURN showing the Number of Measures of Capacity, Measuring Devices, Lineal Measures and Miscellaneous Rejected in each Inspection District during the Fiscal Year ended March 31, 1929

Inspection District	Measures of Capacity			Measuring Devices						Lineal Measures		Miscellaneous									
	Dominion	Milk Cans	Ice Cream Containers	S.M. Pumps	Combined Pump and Visible	Visible	Measuring Tanks	Meter Pumps	Meters	Dominion	Metric	Personal Weigher	Moisture Test Scales	Miner's Attachment	Tipple Scales	Weighto-graphs	Totalizers	Salt Carts and Tubs	Fabric Measures	Measuring Bowls	Tank Wagon
Belleville	75	.....	.....	72	2	203	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	2	1
Hamilton	54	.....	.....	80	4	234	.....	.....	.....	8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
London	.....	.....	.....	65	5	364	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2
Ottawa	4	72	.....	66	4	316	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	.....
Toronto	.....	.....	.....	10	3	64	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	.....	.....
ONTARIO	133	72	.....	293	18	1,181	.....	1	1	8	.....	.....	.....	.....	.....	.....	.....	.....	7	2	4
Montreal	9	.....	.....	120	1	298	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6	.....	.....
Quebec	63	.....	.....	22	.....	38	.....	.....	.....	28	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Sherbrooke	.....	.....	.....	6	.....	30	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Three Rivers	.....	.....	.....	8	.....	37	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
QUEBEC	72	.....	.....	156	1	403	.....	.....	.....	28	.....	.....	.....	.....	.....	.....	.....	.....	6	1	.....
St. John, N.B	.....	.....	.....	36	.....	22	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Halifax, N.S	52	.....	.....	120	9	38	.....	.....	.....	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Charlottetown, P.E.I	.....	.....	.....	24	.....	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Winnipeg, Man	5	.....	.....	66	.....	89	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4	.....	.....
Regina	4	.....	.....	76	.....	48	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Saskatoon	.....	.....	.....	74	.....	59	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
SASKATCHEWAN	4	.....	.....	150	.....	107	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Calgary	2	42	.....	25	1	77	.....	.....	.....	.....	.....	.....	.....	5	.....	.....	.....	.....	.....	.....	.....
Edmonton	20	.....	.....	110	2	148	.....	.....	.....	.....	.....	.....	.....	.....	3	.....	.....	.....	.....	.....	.....
ALBERTA	22	42	.....	135	3	225	.....	.....	.....	.....	.....	.....	.....	5	3	.....	.....	.....	.....	.....	.....
Vancouver, B.C	2	.....	.....	180	.....	69	.....	.....	3	.....	.....	.....	.....	1	.....	.....	.....	.....	4	.....	.....
Totals	290	114	.....	1,160	31	2,138	.....	1	4	40	.....	.....	.....	6	3	.....	.....	.....	21	3	4

DEPARTMENT OF TRADE AND COMMERCE
OTTAWA, CANADA
HON. JAMES MALCOLM, Minister F. C. T. O'HARA, Deputy Minister

ANNUAL REPORT

OF THE

ELECTRICITY AND GAS INSPECTION SERVICES

FOR THE FISCAL YEAR ENDING MARCH 31

1929

OTTAWA
F. A. ACLAND
PRINTER TO THE KING'S MOST EXCELLENT MAJESTY
1929

REPORT

OF THE

INSPECTION OF ELECTRICITY AND GAS

OTTAWA, July 2, 1929.

To the Honourable

The Minister of Trade and Commerce.

SIR,—I have the honour to submit the annual report on the Electricity and Gas Inspection Services, and also statements in connection therewith, for the fiscal year ended March 31, 1929.

F. C. T. O'HARA,
Deputy Minister.

ELECTRICITY AND GAS INSPECTION SERVICES

Mr. J. L. Stiver, Director of Electricity and Gas Inspection services, reports as follows:—

The work of the Electricity and Gas Inspection Services continues to increase very rapidly. The increase in the number of meters tested and the revenues collected during the past year over the year immediately preceding it was slightly over 10 per cent, whereas the increase in expenditure was 2·4 per cent. The following comparative statement for the period above mentioned gives the actual figures in connection with the number of meters tested, revenues and expenditures.

	1927-28	1928-29
Electricity and Gas Inspection Acts—		
Electricity meters tested	293,325	324,998
Gas meters tested	122,684	134,161
Total meters tested	416,009	459,159
Revenue—		
Electricity inspection	$ 189,581 45	$ 212,251 65
Gas inspection	85,715 60	92,447 90
Total revenue	$ 275,297 05	$ 304,699 55
Expenditure—		
Electricity inspection	$ 146,189 40	$ 143,790 81
Gas inspection	52,839 44	60,036 70
Total expenditure	$ 199,028 84	$ 203,827 51
Electricity and Fluid Exportation Act—		
Revenue—		
Export tax	$ 373,676 21	$ 351,108 78
License fees	675 00	675 00
Total revenue—	$ 374,351 21	$ 351,783 78
Expenditure—		
Travelling expenses	$ 440 59	$ 283 81
Total revenue for branch	$ 649,648 26	$ 656,483 33
Total expenditure for branch	199,469 43	204,111 30
Total surplus for branch	$ 450,188 83	$ 452,372 03

As shown by this statement the surplus of revenues over expenditures for the past year was $100,892.04 and constitutes a record for all time. An allowance for rent, fuel and furniture should be made, however, to arrive at a true surplus as the accounts covering these items are paid by the Public Works Department and are not included, also the salaries of the officers at headquarters at Ottawa should be deducted.

Gas Inspection Service

The work in connection with this service reached a maximum during the year just closed. There was a total of 134,161 meters tested, an increase of 11,477 over the previous year, and of this total 44,744 were new meters, the largest number ever presented for verification in one year.

Gas is sold in Canada under two main classes,

(1) Manufactured gas which includes straight coal gas, carburetted water gas, coke oven gas, acetylene gas and a mixed gas which is isually a mixture of coal gas and carburetted water gas.

(2) Natural gas.

The volume of manufactured gas used during the past year was 16,922,-023,500 cubic feet, an increase of 867,187,500 cubic feet. The number of meters used to measure this volume of gas was 504,500, an increase of 22,067. During the year 3,428 calorific tests were made throughout the Dominion, the average value being 495·4 B.T.U.'s per cubic foot. The standard set by our regulations is 450 B.T.U.'s per cubic foot.

The production of natural gas continued to increase at a very rapid rate during the past year, 25,491,446,000 cubic feet were supplied, an increase of 5,141,446,000 cubic feet or approximately 25%. This increase took place mainly in the District of Calgary. The number of meters in service on March 31, 1929, measuring natural gas was 107,594, an increase of 8,589 for the year.

Provision is being made in Southwestern Ontario to supplement the diminishing supply of natural gas by the addition of a manufactured gas. An auxiliary gas plant with a maximum capacity of 6,000,000 cubic feet of gas per day, made from fuel oil, is being constructed at Windsor and further provision has been made when the need arises to erect a coke oven gas plant.

A noticeable feature in connection with the gas industry is the large quantities of gas that are being used by industrial concerns. It naturally follows that the accurate measurement of such quantities is becoming more and more important, a subject in which the branch is vitally interested. In the past we have been accustomed to testing meters having a capacity up to 5,000 cubic feet per hour, which we have been able to handle quite sucessfully, but the testing of meters with capacities ranging from 25,000 to 250,000 cubit feet per hour is an entirely different proposition and requires a great deal of investigational work and research to determine the best way of meeting the situation. Such investigational work possibly does not come within the scope of this branch as the Research Council Act, Chapter 177, R.S., 1927, places it under the jurisdiction of the National Research Council. It gives the council power to undertake in such way as it may deem advisable the investigation and determining of standards and methods of measurements including light, volume, weight, mass, etc. Should such work be undertaken we shall be very pleased to co-operate in every way possible.

Electricity Inspection Service

The work connected with this service continues to grow. During the past year 342,998 meters were tested, an increase of 31,673 over the previous year. The number of new meters increased from 95,496 to 114,795 and the total number of meters in service on March 31, 1929, was approximately 1,500,000, an increase of approximately 78,000 meters.

During the year just closed two prosecutions were instituted for infractions of the Electricity Inspection Act, one in Saskatchewan for failing to register and the other in Quebec for tampering with a meter while in service. Convictions were obtained in both cases.

According to the new Electricity inspection Act passed in June, 1928, a meter is defined as being every kind of machine, apparatus or instrument used for making electrical measurements and includes any device utilized for the purpose of obtaining a basis of a charge for electricity. It also provides that if a contractor or purchaser desires to use a meter for the purpose of establishing a charge for electrical service every meter used for such service shall be verified by an Inspector before being put into service. From this it will be seen that any peace of apparatus used to obtain information on which a charge for electricity is to be made comes within the jurisdiction of the Electricity Inspection Service.

The electric meters used in Canada to-day include amperehour, watthour, graphic, thermal and block interval demand, excess demand, two rate, prepayment, totalizing graphic and thermal converters. Many of these meters are used in conjunction with instrument transformers and as the accuracy of the meters in measuring electrical quantities is dependent upon the accuracy of the transformers it is necessary that our Inspectors be thoroughly conversant with the various installations that may be made. In many instances these installations are very complicated and require the services of expert metermen.

Electrical and Gas Standard Laboratories

The work performed in the laboratories at Ottawa, Winnipeg and Vancouver is most important and consists mainly of two things, namely, the checking of the Inspection Standards supplied to the various districts throughout the Dominion, and the testing and examination of meters presented for approval for use in Canada. The work in connection with the checking of the Inspection Standards is particularly important as a certificate based on the reading of these instruments takes precedence ever any other similar certificate. The working standards maintained in the laboratories for checking the Inspection Standards are periodically checked against the Primary Standards. The Primary Standards, in the Ottawa Laboratory, are recognized as the Electrical Primary Standards for Canada and will continue to be so recognized until such time as the National Research Council provides a laboratory for their maintenance.

In connection with the approval of meters for use in Canada twenty-three electric meters and three gas meters were examined and tested of which eight electric meters and one gas meter were approved. The new Electricity Inspection Act places the approval of meters for use in Canada under the jurisdiction of the National Research Council, but as they have no laboratory in which this work can be done they have requested us to carry on as in the past.

The present trends in meter design are towards increase in range and compensation for temperature so as to reduce as far as possible the number of sizes of meters required to cover the field. The result of this is that the adjustments for various qualities are no longer confined to their special field but effect the fields of other adjustments. Hence the work of examination has to cover not only the field of each individual adjustment but also of their combination, vastly increasing the time required for examination for approval and making standardization of this work impossible at present.

A considerable amount of work has been necessitated by the discovery that instruments generally held to be equally accurate on alternating and direct current work cannot be so accepted without trial as to their possession of this quality.

Some time was devoted to the investigation of an insecticidal powder undertaken on behalf of the Department of Agriculture. It was claimed that it possessed certain electrical qualities due to electrical treatment during manufacture. The result of special tests devised during this investigation showed that the claim was not justified.

Exportation of Electrical Energy

During the past year the number of kilowatt hours produced for export was 1,604,212,276, a decrease of 70,643,731 kilowatt-hours from the preceding year. This decrease is equivalent to 10,810 horse-power years. The revenue collected by virtue of the export duty was $351,108.78, a decrease of $22,567.43, and the expenditures amounted to $283.81.

Staff

The same staff as last year with an addition of only two inspectors appointed, to fill new positions created in the London and Regina districts was able to satisfy the demands of the various companies in respect of meter inspection in spite of the fact that there was a ten per cent increase in the amount of work performed. To meet these demands, however, it was frequently necessary for many of our inspectors to work irrespective of office hours and the willingness with which it was done is very commendable. The following extract from a letter received recently from a well known member of the Meter Committee of the Canadian Electrical Association is quite apropos. He says: "I am receiving from all sections very satisfactory reports of the work being carried out by your Inspectors and it certainly seems that the work of meter testing is now organized so that the job can be done in a very thorough and accurate manner."

APPENDIX A

STATEMENT of Expenditures and Revenues for the Fiscal Year ended March 31, 1929

District	District Inspector	Electricity Inspection Service		Gas Inspection Service	
		Total Expenditure	Total Revenue	Total Expenditure	Total Revenue
ONTARIO—		$ cts.	$ cts.	$ cts.	$ cts.
Belleville	W. H. Middleton	8,225 25	5,594 70		2,288 90
Fort William	E. Little	2,800 63	2,105 75		
Hamilton	H. H. Wilson	1,912 74	15,499 10	13,169 75	9,556 00
London	J. C. Smith	14,543 56	17,236 95	1,211 02	10,873 20
Ottawa	J. A. Ham	11,858 53	11,856 55		2,307 40
Sudbury	L. H. Bouskill	3,085 18	4,653 75		180 20
Toronto	S. F. Johnstone	25,318 21	34,589 10	450 07	24,125 40
Totals for Ontario		67,744 10	91,535 90	14,830 84	49,331 10
QUEBEC:					
Montreal	R. J. Chevrier	2,766 64	40,658 95	29,303 01	23,234 20
Quebec	J. A. Cantin	6,884 61	9,868 35		1,790 80
Three Rivers	A. Olivier	4,311 36	5,774 90		
Total for Quebec		13,962 61	56,302 20	29,303 01	25,025 00
NEW BRUNSWICK:					
St. John	C. E. Grant	3,913 40	6,141 35	252 79	1,502 40
NOVA SCOTIA:					
Halifax	S. W. Withers	4,668 00	4,120 95		650 80
P. E. ISLAND:					
Charlottetown	P. E. Palmer	954 70	522 60		
MANITOBA:					
Winnipeg	F. C. Babington	1,151 27	15,077 95	10,758 53	3,248 60
SASKATCHEWAN:					
Regina	Louis Weber	6,564 02	10,003 25		
ALBERTA:					
Calgary	W. P. Kyle	7,591 98	5,860 00		4,239 00
Edmonton	A. J. Cantin	5,003 08	4,306 05		1,142 60
Totals for Alberta		12,595 06	10,166 05		5,381 60
BRITISH COLUMBIA:					
Nelson	H. B. Penny	2,926 86	1,848 10		208 80
Vancouver	G. T. Scouler	10,955 28	12,537 20		6,286 20
Victoria	E. H. Ruttan	456 08	3,769 50	4,281 34	763 40
Totals for British Columbia		14,338 22	18,154 80	4,281 34	7,258 40
Director	J. L. Stiver	499 53			
Asst. Director	H. A. Dupre	134 35			
Supt. East. Div.	H. M. Clark	4,023 89			
Supt. Cent. Div.	S. N. Hart	3,707 25			
Supt. West. Div.	J. Stott	4,157 87			
		12,522 89			
Totals for Districts		138,414 27	212,025 05	59,426 51	92,397 90
General Contingencies		1,478 14			
Equipment		2,313 54			
Printing		1,098 84		549 41	
Stationery		70 54		35 28	
Government Publications		51 00		25 50	
Electrotechnical Commission		364 68			
Electricity Laboratory Fees			225 50		
Casual Revenue			1 10		50 00
		143,790 81	212,251 65	60,036 70	92,447 90
Electricity and Fluid Exportation Act		283 81	351,108 78		
Export License Fees			675 00		
Printing of Parliamentary and Departmental Publications		417 95			

APPENDIX B

STATEMENT of Electric Meters Tested during the Fiscal Year 1928-29

District	Correct	Accepted		Rejected		New	Re-tests	Dis-putes	Totals	Class I	Class II	Class III	Class IV
		Not over 3% fast	Not over 3% slow	Over 3% fast	Over 3% slow								
Belleville	3,401	3,733	1,389	4	.....	2,961	5,559	7	8,527	5,757	2,690	80	.....
Calgary	2,446	5,524	700	81	60	4,301	4,468	42	8,811	7,285	1,440	30	56
Charlottetown	228	450	163	7	6	299	547	8	854	786	68	.....	.....
Edmonton	914	5,859	220	7	36	3,817	3,218	1	7,036	6,478	557	1	.....
Fort William	276	2,431	460	1	.....	966	2,197	5	3,168	1,985	1,155	28	.....
Halifax	5,348	761	587	1	4	3,806	2,889	6	6,701	6,122	561	18	.....
Hamilton	12,797	6,386	3,661	34	35	6,464	16,371	78	22,913	12,731	9,890	292	.....
London	5,398	14,152	5,240	31	91	6,567	18,277	68	24,912	12,417	11,975	517	3
Montreal	4,693	38,436	19,978	246	321	22,076	41,487	111	63,674	58,761	2,757	2,118	38
Nelson	1,693	1,280	25	.....	1	832	2,159	8	2,999	2,696	300	3	.....
Ottawa	2,816	11,942	2,922	266	178	5,609	12,227	288	18,124	12,688	5,247	189	.....
Quebec	4,722	7,722	3,294	13	8	8,668	7,016	75	15,759	14,616	917	201	25
Regina	5,743	8,946	1,201	3	7	8,828	7,057	15	15,900	12,955	2,943	2	.....
St. John	1,812	7,075	1,071	1	.....	2,587	7,360	12	9,959	8,981	955	23	.....
Sudbury	2,185	4,506	671	.....	9	3,435	3,930	6	7,371	5,996	1,358	17	.....
Three Rivers	800	5,327	2,999	4	2	3,988	5,142	2	9,132	8,024	938	170	.....
Toronto	13,964	28,422	7,578	124	289	14,952	35,370	55	50,377	29,131	19,682	1,564	.....
Vancouver	6,378	11,171	2,157	191	220	5,634	14,447	36	20,117	15,851	4,243	23	.....
Victoria	944	4,804	382	.....	.....	1,311	4,811	8	6,130	5,600	514	16	.....
Winnipeg	2,066	20,226	237	3	2	7,694	14,816	24	22,534	14,107	8,051	376	.....
Total	78,624	189,153	54,935	1,017	1,269	114,795	209,348	855	324,998	242,967	76,241	5,668	122

APPENDIX C

STATEMENT of Gas Meters Tested during the Fiscal Year 1928-29

District	Correct	Accepted		Rejected		New	Re-tests	Dis-putes	Totals	Class I 60c.	Class II $1.00	Class III $2	Class IV $2.50
		Not over 2% fast	Not over 3% slow	Over 2% fast	Over 3% slow								
Belleville	862	258	941	35	21	199	1,907	11	2,117	2,094	17	.....	6
Calgary	975	654	4,552	13	4	2,599	3,581	18	6,198	5,715	347	67	69
Edmonton	576	48	1,069	13	.....	1,056	626	24	1,706	1,566	73	42	5
Halifax	519	3	137	.....	1	233	425	2	660	643	12	2	3
Hamilton	5,458	1,380	6,672	19	8	3,087	10,406	44	13,537	12,980	487	15	55
London	2,951	3,782	9,024	8	2	5,560	10,202	5	15,767	15,307	372	32	56
Montreal	3,235	9,515	23,705	122	200	13,343	23,326	108	36,777	36,462	269	42	4
Nelson	34	5	207	.....	.....	51	195	.....	246	243	3	.....	.....
Ottawa	570	1,061	846	6	2	595	1,885	5	2,485	2,429	29	4	13
Quebec	938	778	616	6	3	1,073	1,261	7	2,341	2,293	43	4	1
St. John	743	106	727	1	.....	329	1,241	7	1,577	489	1,087	1	.....
Sudbury	91	164	39	.....	.....	294	.....	.....	294	287	6	1	.....
Toronto	10,578	4,408	21,891	47	29	11,551	25,304	98	36,953	35,824	957	90	82
Vancouver	1,097	3,296	4,314	57	43	4,548	4,230	29	8,807	8,442	313	33	19
Victoria	166	437	191	1	1	169	624	3	796	684	111	1	.....
Winnipeg	2,251	376	1,269	2	2	57	3,836	7	3,900	3,826	73	1	.....
Totals	31,044	26,271	76,200	330	316	44,744	89,049	368	134,161	129,284	4,199	335	313

APPENDIX D

MANUFACTURED Gas Companies Registered and Gas Tests made

District	Company	Kind of Gas	Number of Meters	Class of Company	Calorific Tests Standard: 450 B.T.U.'s per cubic foot					Number of times below standard value
					Number of Tests		B.T.U. values found			
					Prescribed	Made	Highest	Lowest	Average	
Belleville	Port Hope Gas Company	Coal	425	5	24	23	585·5	488·3	516·6	0
	Hydro-Electric Power Commission of Cobourg	Coal	369	5	24	23	572·1	467·7	505·2	
	Belleville Gas Department	C. & C.W	1,335	4	48	48	461·0	450·1	455·5	0
	Hydro Electric Power Commission of Oshawa	C.W	1,420	4	48	41	456·4	450·1	452·5	0
	Hydro Electric Power Commission of Peterboro	C.W	3,824	3	96	88	484·1	450·3	457·8	0
	Corporation of Brockville	C.W	1,991	3	96	88	620·5	506·3	554·9	0
	Corporation of Kingston	C.W	3,851	3	96	88	590·9	489·7	535·9	0
Halifax	Nova Scotia Light and Power Company	Coal	2,819	3	96	96	547·5	470·2	498·1	0
Hamilton	United Gas and Fuel Company	M'f'd	22,700	1	300	300	568·0	489·0	524·5	0
	Kitchener Public Utilities	C. & C.W	5,030	2	96	96	502·0	450·0	468·6	0
	Public Utilities Commission of Waterloo		1,034							
London	City Gas Company, London	C. & C.W	13,248	1	300	300	594·0	451·0	506·0	0
	St. Thomas Gas Department	C. & C.W	3,450	3	96	96	606·0	477·0	535·0	0
	Stratford Gas Department	C. & C.W	822	5	24	24	587·0	473·0	537·0	0
Montreal	Montreal Light, Heat and Power Consolidated	Mixed	179,400	1	300	300	532·2	450·6	477·5	0
	Corporation of Sherbrooke	C.W	2,259	3	76	76	514·2	441·9	482·0	1
Nelson	Corporation of Nelson	Coal	642	5	24	24	464·2	450·8	455·8	0
Ottawa	The Ottawa Gas Company	Coal	17,511	1	300	300	520·0	471·0	498·4	0
	The Stormont Gas Company	Ceased the manufacture of gas on April 11th, 1928.								
Quebec	Quebec Gas Company	C.W	9,932	2	144	144	498·6	451·4	466·6	0
St. John	New Brunswick Power Company, St. John	Coal	1,801	4	48	48	600·0	469·0	548·0	
	Citizens Gas Company, St. Stephen		150							
Sudbury	Great Northern Gas Co., Ltd., Sault Ste. Marie	Coke oven	1,269							
Toronto	Consumers Gas Company, Toronto	C. & C.W	159,058	1	300	300	557·0	468·6	499·9	0
	Corporation of Guelph	C. & C.W	4,461	3	96	96	520·0	461·3	497·6	0
	Corporation of Owen Sound	C.W	1,412	4	48	48	548·0	452·7	484·2	0
	Barrie Gas Company	C.W	365	5	24	24	565·4	450·4	501·1	0
Vancouver	British Columbia Power and Gas Co	M'f'd	39,095	1	313	313	483·1	425·5	458·8	28
Victoria	Victoria Gas Company	Coal	4,596	3	96	96	481·7	436·5	459·4	6
Winnipeg	Winnipeg Electric Company, Limited	Coke oven	18,931	1	300	300	569·8	485·6	523·3	0
	Canadian Gas and Electric Corporation (Brandon)	Coal	1,300	4	48	48	509·2	453·8	475·7	0
	Total		504,500		3,461	3,428			495·4	

APPENDIX E

STATEMENT of Natural Gas Companies Registered

District	Name of Company	Location	Number of Meters
Calgary	Canadian Western Natural Gas Light, Heat & Power Co., Ltd.	Calgary	15,712
	" " "	Lethbridge	1,821
	" " "	MacLeod	333
	" " "	Claresholm	298
	" " "	Granum	106
	" " "	Nanton	186
	" " "	Okotoks	158
	" " "	Brooks	157
	" " "	Main Line	38
	" " "	Field	1
	" " "	Bowness	14
	" " "	Turner Valley Line	9
	" " "	Stavely	90
	" " "	Parkland	24
	" " "	High River	298
	The Town of Bow Island	Bow Island	100
	United Natural Gas Development Company, Limited	Foremost	.....
	City of Medicine Hat	Medicine Hat	2,500
	Canadian Western Power & Fuel Company, Limited	Redcliff	275
	W. F. Higgins Estate	Suffield	.....
	Royalite Oil Company, Limited	Turner Valley	7
	Dalhousie Oil Company, Limited	Turner Valley	1
	Foothills Oil & Gas Company	Turner Valley	.....
	Home Oil Company, Limited	Turner Valley	1
	Illinois-Alberta Oils, Limited	Turner Valley	.....
	McLeod Oil Company, Limited	Turner Valley	.....
Edmonton	Northwestern Utilities Limited	Bruce	43
	" "	Edmonton	8,433
	" "	Holden	81
	" "	Ryley	89
	" "	Shonts	3
	" "	Tofield	147
	" "	Viking	180
	Wainwright Gas Company, Limited	Wainwright	270
Hamilton	Brantford Gas Company	Brantford	3,388
	Provincial Natural Gas & Fuel Company of Ontario, Ltd.	Bridgeburg	1,220
	Chippawa Development Company, Limited	Chippawa	25
	Chippawa Oil and Gas Company, Limited	Lincoln County	201
	Dominion Natural Gas Company, Limited	Cayuga	209
	Industrial Natural Gas Company, Limited	Crowland, Bertie & Humberstone	88
	Port Colborne-Welland Natural Gas & Oil Company	Caledonia	636
	Dominion Natural Gas Company, Ltd.	Blackheath	212
	" " "	Delhi	271
	" " "	Dundas	1,153
	" " "	Dunnville	1,281
	" " "	Echo Place	217
	Lake Shore Natural Gas Company, Limited	Fort Erie	350
	Fonthill & Ridgeville Gas Company, Limited	Fonthill	189
	Dominion Natural Gas Company, Limited	Galt	1,135
	" "	Hagersville	397
	" "	Hamilton	3,630
	Midfield Natural Gas Company, Ltd.	Twp. of North Cayuga and Oneida	28
	Dominion Natural Gas Company, Ltd.	Jarvis	241
	" "	Lynedock	53
	Cliff Gas Company, Limited	Moulton and Canboro	34
	Provincial Natural Gas & Fuel Company of Ontario, Ltd.	Niagara Falls	2,849
	Dominion Natural Gas Company, Ltd.	Paris	515
	" "	Port Dover	560
	" "	Port Rowan	253

APPENDIX E—Concluded

STATEMENT of Natural Gas Companies Registered

District	Name of Company	Location	Number of Meters
Hamilton—*Con*.....	Sterling Gas Company, Limited.....	Port Colborne.....	1,672
	Dominion Natural Gas Company, Ltd.	Selkirk.....	765
	" " ..	Simcoe.....	1,809
	" " ..	St. George.....	95
	" " ..	St. Williams.....	110
	Provincial Natural Gas & Fuel Company of Ontario, Limited.....	Sherkston.....	1,969
	United Gas Companies, Ltd.....	St. Catharines.....	5,855
	Dominion Natural Gas Company, Ltd.	Vittoria.....	81
	Provincial Natural Gas & Fuel Company of Ontario, Ltd.....	Welland.....	2,363
	J. A. Coleman.....	Wellandport.....	37
	Robert H. Smith.....	Low Banks.....	9
London.....	Central Pipe Line Company, Limited of Chatham.....	Aylmer.....	686
	" " ..	Malahide and Bayham.....	77
	" " ..	Port Burwell.....	92
	" " ..	Vienna.....	75
	Dominion Natural Gas Company, Ltd.	Ingersoll.....	919
	" " ..	Tillsonburg.....	1,434
	" " ..	Woodstock.....	1,581
	Oil Springs Oil & Gas Company, Ltd..	Oil Springs.....	143
	Ontario Salt Company, Limited.....	Belmont.....	60
	Town of Leamington.....	Leamington.....	1,420
	Southern Ontario Gas Company, Ltd..	Aldboro.....	24
	" " ..	Dorchester and Wallacetown....	157
	" " ..	Dunwich Township.....	53
	" " ..	Dutton.....	252
	" " ..	Highgate.....	114
	" " ..	Kingsville (Beaver Division)....	1,018
	" " ..	Kingsville (Glenwood Division).	200
	" " ..	Lambeth.....	91
	" " ..	Leamington County.....	638
	" " ..	Orford and Howard Townships..	54
	" " ..	Raleigh and Harwich Townships	14
	" " ..	Rodney.....	257
	" " ..	Shedden and Fingal.....	138
	" " ..	Southwold Township.....	105
	" " ..	Westminster Township.....	142
	" " ..	West Lorne.....	221
	" " ..	Wheatley County.....	244
	Union Natural Gas Company, Ltd. of Canada.....	Blenheim.....	547
	" " ..	Chatham.....	4,096
	" " ..	Dresden.....	507
	" " ..	Essex.....	480
	" " ..	Ford City.....	1,472
	" " ..	Petrolia.....	784
	" " ..	Ridgetown.....	637
	" " ..	Tilbury.....	492
	" " ..	Sarnia.....	4,633
	" " ..	Wallaceburg.....	1,213
	" " ..	Riverside.....	186
	" " ..	Sandwich.....	1,021
	" " ..	Walkerville.....	1,543
	" " ..	Windsor.....	9,368
St. John.....	Moncton Tramways, Electricity & Gas Company, Limited.....	Moncton.....	5,041
	Total number of meters.....	.....	107,504

APPENDIX F

ACETYLENE Gas Companies Registered

District	Company	Location	Number of Meters
Ottawa.....	People's Gas Supply Company, Ltd...	Ottawa, Ont.....	1
Winnipeg.....	Shawinigan Chemicals, Ltd.....	Morris, Man.....	66
	Souris Consumers Gas Co., Ltd.....	Souris, Man.....	49
	Total number of meters.....	.....	116

APPENDIX G

STATEMENT showing amount of Electrical Energy, Gas, or Fluid generated or produced for export and for consumption in Canada, under the authority of the Electricity and Fluid Exportation Act, for the year ending 31st day of March, 1929.

Name of Contractor and place of business	Month	Units produced for export		Units produced for use in Canada		Total output of generating Station or other Source	
		K.W. hours	H.P. years	K.W. hours	H.P. years	K.W. hours	H.P. years
Hydro-Electric Power Commission of Ontario, Toronto, Ont.	April	31,617,400	4,838·16	232,090,400	35,514·98	263,707,800	40,353·14
	May	33,259,500	5,089·44	238,812,300	36,543·58	272,071,800	41,633·02
	June	31,807,300	4,867·22	233,102,200	35,669·81	264,909,500	40,537·03
	July	32,793,700	5,018·16	226,218,300	34,616·42	259,012,000	39,634·58
	Aug.	33,086,500	5,062·97	236,117,400	36,131·20	269,203,900	41,194·17
	Sept.	32,062,700	4,906·30	247,578,900	37,885·07	279,641,600	42,791·37
	Oct.	33,529,700	5,130·79	244,979,200	37,487·25	278,508,900	42,618·04
	Nov.	32,280,100	4,939·57	245,359,200	37,545·40	277,639,300	42,484·97
	Dec.	33,146,200	5,072·10	263,957,500	40,391·35	297,103,700	45,463·45
	Jan.	33,314,400	5,097·84	280,584,600	42,935·67	313,899,000	48,033·51
	Feb.	30,440,500	4,658·07	251,067,100	38,418·84	281,507,600	43,076·91
	March	33,168,000	5,075·44	271,736,600	41,581·73	304,904,600	46,657·17
	Totals	390,506,000	59,756·06	2,971,603,700	454,721·30	3,362,109,700	514,477·36
Hydro-Electric Power Commission of Ontario, Toronto, Ont. (surplus).	April	35,416,300	5,419·48			35,416,300	5,419·48
	May	44,685,600	6,837·89			44,685,600	6,837·89
	June	36,137,800	5,529·89			36,137,800	5,529·89
	July	30,406,200	4,652·82			30,406,200	4,652·82
	Aug.	44,612,800	6,826·75			44,612,800	6,826·75
	Sept.	26,456,800	4,048·48			26,456,800	4,048·48
	Oct.	50,970,900	7,799·68			50,970,900	7,799·68
	Nov.	40,234,200	6,156·72			40,234,200	6,156·72
	Dec.	27,348,100	4,184·87			27,348,100	4,184·87
	Jan.	20,710,500	3,169·16			20,710,500	3,169·16
	Feb.	23,164,300	3,544·65			23,164,300	3,544·65
	March	26,977,400	4,128·14			26,977,400	4,128·14
	Totals	407,120,900	62,298·53			407,120,900	62,298·53
Cedars Rapids Manufacturing and Power Company, Ltd., Montreal, Que.	April	30,098,756	4,605·78	36,244,000	5,546·14	66,342,756	10,151·92
	May	31,580,215	4,832·47	36,520,000	5,588·37	68,100,215	10,420·84
	June	32,370,424	4,953·39	35,495,000	5,431·52	67,865,424	10,384·91
	July	39,166,674	5,993·37	38,691,000	5,920·58	77,857,674	11,913·95
	Aug.	40,497,420	6,197·00	38,301,000	5,860·90	78,798,420	12,057·90
	Sept.	42,996,625	6,579·44	41,326,975	6,323·94	84,323,600	12,903·38
	Oct.	42,920,549	6,567·80	40,880·000	6,255·55	83,800,549	12,823·35
	Nov.	38,935,244	5,957·96	40,914,000	6,260·75	79,849,244	12,218·71
	Dec.	34,911,328	5,342·21	40,098,000	6,135·88	75,009,328	11,478·09
	Jan.	34,886,705	5,338·44	42,994,000	6,579·04	77,880,705	11,917·48
	Feb.	33,654,354	5,149·86	38,499,000	5,891·20	72,153,354	11,041·06
	March	41,586,468	6,363·65	40,247,000	6,158·68	81,833,468	12,522·33
	Totals	443,604,762	67,881·37	470,209,975	71,952·55	913,814,737	139,833·92
Canadian Niagara Power Co., Ltd., Niagara Falls, Ont.	April	26,286,696	4,022·45	23,936,064	3,662·75	50,222,760	7,685·20
	May	26,331,600	4,029·32	25,156,944	3,849·57	51,488,544	7,878·89
	June	28,587,072	4,374·46	21,313,152	3,261·39	49,900,224	7,635·85
	July	29,583,024	4,526·86	22,327,464	3,416·60	51,910,488	7,943·46
	Aug.	29,368,992	4,494·11	23,856,648	3,650·59	53,225,640	8,144·70
	Sept.	29,394,792	4,498·05	20,662,560	3,161·83	50,057,352	7,659·88
	Oct.	28,833,700	4,412·19	25,491,300	3,900·73	54,325,000	8,312·92
	Nov.	27,130,370	4,151·55	25,231,430	3,860·97	52,361,800	8,012·52
	Dec.	27,859,600	4,263·14	26,258,100	4,018·07	54,117,700	8,281·21
	Jan.	25,338,500	3,877·35	27,048,500	4,139·02	52,387,000	8,016·37
	Feb.	24,062,800	3,682·14	24,986,300	3,823·46	49,049,100	7,505·60
	March	25,944,420	3,970·07	26,630,280	4,075·02	52,574,700	8,045·09
	Totals	328,721,566	50,301·69	292,898,742	44,820·00	621,620,308	95,121·69
Canadian Niagara Power Co., Ltd., Niagara Falls, Ont. (surplus).	April	700	0·11			700	0·11
	May						
	June	31,200	4·77			31,200	4·77
	July	88,000	13·47			88,000	13·47
	Aug.	4,100	0·63			4,100	0·63
	Sept.	6,100	0·93			6,100	0·93
	Oct.	1,200	0·18			1,200	0·18
	Nov.						
	Dec.	51,100	7·82			51,100	7·82
	Jan.						
	Feb.						
	March						
	Totals	182,400	27·91			182,400	27·91

APPENDIX G—Continued

STATEMENT showing amount of Electrical Energy, Gas, or Fluid generated or produced for export and for consumption in Canada, under the authority of the Electricity and Fluid Exportation Act, for the year ending 31st day of March, 1929.

Name of Contractor and place of business	Month	Units produced for export		Units produced for use in Canada		Total output of generating Station or other Source	
		K.W. hours	H.P. years	K.W. hours	H.P. years	K.W. hours	H.P. years
Western Power Company Of Canada, Limited, Vancouver, B.C.	April	.....	.....	16,991,600	2,600·09	16,991,600	2,600·09
	May	.....	.....	.....	.....	.....	.....
	June	.....	.....	17,065,000	2,611·33	17,065,000	2,611·33
	July	.....	.....	17,065,000	2,611·33	17,065,000	2,611·33
	Aug.	38,993	5·97	21,845,207	3,342·80	21,884,200	3,348·77
	Sept.	82,058	12·56	21,284,442	3,256·99	21,366,500	3,269·55
	Oct.	.....	.....	24,804,100	3,795·57	24,804,100	3,795·57
	Nov.	.....	.....	25,780,600	3,945·00	25,780,600	3,945·00
	Dec.	129,038	19·74	27,468,362	4,203·27	27,597,400	4,223·01
	Jan.	357,831	54·76	28,374,669	4,341·95	28,732,500	4,396·71
	Feb.	.....	.....	18,367,000	2,810·56	18,367,000	2,810·56
	March	3,445	0·52	18,343,855	2,807·02	18,347,300	2,807·54
	Totals	611,365	93·55	237,389,835	36,325·91	238,001,200	36,419·46
Ontario & Minnesota Power Company, Ltd., Fort Frances, Ont.	April	1,365,000	208·88	403,706	61·78	1,768,706	270·66
	May	1,430,500	218·90	397,126	60·77	1,827,626	279·67
	June	1,510,700	231·17	393,679	60·24	1,904,379	291·41
	July	1,535,100	234·90	379,292	58·04	1,914,392	292·94
	Aug.	1,713,100	262·14	400,801	61·33	2,113,901	323·47
	Sept.	1,487,100	227·56	430,834	65·93	1,917,934	293·49
	Oct.	1,333,700	204·08	438,500	67·10	1,772,200	271·18
	Nov.	1,627,300	249·01	427,200	65·37	2,054,500	314·38
	Dec.	1,243,100	190·22	472,500	72·30	1,715,600	262·52
	Jan.	1,177,500	180·19	492,900	75·42	1,670,400	255·61
	Feb.	1,293,400	197·92	403,400	61·73	1,696,800	259·65
	March	1,548,200	236·91	400,600	61·30	1,948,800	298·21
	Totals	17,264,700	2,641·88	5,040,538	771·31	22,305,238	3,413·19
Maine & New Brunswick Electrical Power Co., Presque Isle, Maine, U.S.A.	April	699,210	106·99	220,590	33·76	919,800	140·75
	May	770,899	117·96	169,101	25·88	940,000	143·84
	June	651,374	99·67	269,826	41·29	921,200	140·96
	July	701,846	107·40	226,154	34·61	928,000	142·01
	Aug.	731,589	111·95	245,511	37·57	977,100	149·52
	Sept.	827,702	126·66	271,098	41·48	1,098,800	168·14
	Oct.	1,000,067	153·03	243,633	37·28	1,243,700	190·31
	Nov.	958,921	146·74	237,879	36·40	1,196,800	183·14
	Dec.	1,020,430	156·15	247,870	37·93	1,268,300	194·08
	Jan.	975,057	149·21	260,543	39·85	1,235,600	189·06
	Feb.	855,374	130·89	243,926	37·33	1,099,300	168·22
	March	971,682	148·69	227,418	34·80	1,199,100	183·49
	Totals	10,164,151	1,555·34	2,863,549	438·18	13,027,700	1,993·52
British Columbia Electric Railway Company, Ltd., Vancouver, B.C.	April	72,638	11·11	12,784,462	1,956·31	12,857,100	1,967·42
	May	65,861	10·08	16,682,739	2,552·83	16,748,600	2,562·91
	June	58,008	8·88	10,544,892	1,613·60	10,602,900	1,622·48
	July	60,509	9·26	11,520,391	1,762·87	11,580,900	1,772·13
	Aug.	67,833	10·38	10,509,367	1,608·17	10,577,200	1,618·55
	Sept.	67,347	10·30	10,985,953	1,681·09	11,053,300	1,691·39
	Oct.	67,798	10·37	10,105,802	1,546·41	10,173,600	1,556·78
	Nov.	69,841	10·69	9,769,159	1,494·90	9,839,000	1,505·59
	Dec.	66,602	10·19	11,639,898	1,781·16	11,706,500	1,791·35
	Jan.	68,083	10·42	12,658,617	1,937·05	12,726,700	1,947·47
	Feb.	64,876	9·93	17,553,724	2,686·11	17,618,600	2,696·04
	March	78,176	11·96	18,013,924	2,756·53	18,092,100	2,768·49
	Totals	807,572	123·57	152,768,928	23,377·03	153,576,500	23,500·60
West Kootenay Power and Light Company, Rossland, B.C.	April	47,600	7·28	43,011,200	6,581·67	43,058,800	6,588·95
	May	39,600	6·06	41,695,200	6,380·29	41,734,800	6,386·35
	June	32,600	4·99	36,440,200	5,576·16	36,472,800	5,581·15
	July	32,000	4·89	37,880,600	5,796·57	37,912,600	5,801·46
	Aug.	43,300	6·63	40,642,800	6,219·25	40,686,100	6,225·88
	Sept.	44,000	6·73	40,954,700	6,266·98	40,998,700	6,273·71
	Oct.	55,500	8·49	46,636,200	7,136·38	46,691,700	7,144·87
	Nov.	49,600	7·59	44,815,100	6,857·70	44,864,700	6,865·29
	Dec.	58,100	8·89	48,007,300	7,346·18	48,065,400	7,355·07
	Jan.	57,300	8·77	46,980,000	7,188·98	47,037,300	7,197·75
	Feb.	45,000	6·89	40,374,600	6,178·21	40,419,600	6,185·10
	March	46,500	7·12	45,301,600	6,932·15	45,348,100	6,939·27
	Totals	551,100	84·33	512,739,500	78,460·52	513,290,600	78,544·85

APPENDIX G—Concluded

STATEMENT showing amount of Electrical Energy, Gas, or Fluid generated or produced for export and for consumption in Canada, under the authority of the Electricity and Fluid Exportation Act, for the year ending 31st day of March, 1929.

Name of Contractor and place of business	Month	Units produced for export		Units produced for use in Canada		Total output of generating Station or other Source	
		K.W. hours	H.P. years	K.W. hours	H.P. years	K.W. hours	H.P. years
Maritime Electric Company, Limited, St. Stephen, N.B.	April	51,345	7·86	97,780	14·96	149,125	22·82
	May	43,888	6·72	73,134	11·19	117,022	17·91
	June	45,240	6·92	95,347	14·59	140,587	21·51
	July	45,234	6·92	117,232	17·94	162,466	24·86
	Aug	51,333	7·85	126,524	19·36	177,857	27·21
	Sept	55,164	8·44	133,255	20·39	188,419	28·83
	Oct	69,090	10·57	166,300	25·45	235,390	36·02
	Nov	79,974	12·24	171,800	26·29	251,774	38·53
	Dec	92,251	14·12	173,342	26·52	265,593	40·64
	Jan	88,425	13·53	152,977	23·41	241,402	36·94
	Feb	78,789	12·06	142,110	21·75	220,899	33·81
	March	64,789	9·91	142,201	21·76	206,990	31·67
	Totals	765,522	117·14	1,592,002	243·61	2,357,524	360·75
Southern Canada Power Company, Montreal, P.Q.	April	131,920	20·19	797,280	122·00	929,200	142·19
	May	110,790	16·95	858,610	131·39	969,400	148·34
	June	38,848	5·94	882,552	135·05	921,400	140·99
	July	35,424	5·42	1,012,576	154·95	1,048,000	160·37
	Aug	35,976	5·50	924,024	141·39	960,000	146·89
	Sept	40,650	6·22	1,010,200	154·58	1,050,850	160·80
	Oct	34,750	5·32	999,250	152·91	1,034,000	158·23
	Nov	37,750	5·78	1,073,850	164·32	1,111,600	170·10
	Dec	40,000	6·12	1,265,200	193·60	1,305,200	199·72
	Jan	35,200	5·39	1,196,800	183·14	1,232,000	188·53
	Feb	36,300	5·55	1,046,500	160·14	1,082,800	165·69
	March	33,000	5·05	1,313,000	200·92	1,346,000	205·97
	Totals	610,608	93·43	12,379,842	1,894·39	12,990,450	1,987·82
International Electric Co., Limited, Stewart, B.C.	April	1,820	0·28	5,487	0·84	7,307	1·12
	May	1,840	0·28	5,520	0·84	7,360	1·12
	June	4,340	0·68	10,450	1·60	14,790	2·28
	July	12,140	1·86	12,282	1·88	24,422	3·74
	Aug	5,400	0·82	10,868	1·66	16,268	2·48
	Sept	7,860	1·20	12,217	1·87	20,077	3·07
	Oct	9,850	1·52	19,700	3·01	29,550	4·53
	Nov	11,620	1·78	25,161	3·85	36,781	5·63
	Dec	3,240	0·49	16,128	2·47	19,368	2·96
	Jan	4,280	0·65	16,128	2·47	20,408	3·12
	Feb	2,530	0·39	14,321	2·19	16,851	2·58
	March	4,410	0·67	16,728	2·56	21,138	3·23
	Totals	69,330	10·61	164,990	25·24	234,320	35·85
Fraser Companies, Ltd., Edmundston, N.B.	April	27,000	4·13	1,538,000	235·35	1,565,000	239·48
	May	195,000	29·84	1,881,400	287·90	2,076,400	317·74
	June	19,000	2·91	1,760,800	269·44	1,779,800	272·35
	July	91,000	13·92	2,445,100	374·15	2,536,100	388·07
	Aug	44,000	6·73	2,227,800	340·90	2,271,800	347·63
	Sept	40,000	6·12	2,109,900	322·86	2,149,900	328·98
	Oct	317,000	48·51	2,402,100	367·57	2,719,100	416·08
	Nov	647,000	99·00	2,887,200	441·81	3,534,200	540·81
	Dec	538,000	82·33	3,106,500	475·36	3,644,500	557·69
	Jan	656,300	100·43	.....	.....	656,300	100·43
	Feb	409,000	62·59	.....	.....	409,000	62·59
	March	249,000	38·10	.....	.....	249,000	38·10
	Totals	3,232,300	494·61	20,358,800	3,115·34	23,591,100	3,609·95

SUMMARY

Hydro Elec. Power Comm. of Ontario	390,506,000	59,756·06	2,971,603,700	454,721·30	3,362,109,700	514,477·36
Hydro Elec. Power Comm. (surplus)	407,120,900	62,298·53	.....	.....	407,120,900	62,298·53
Cedars Rapids Mfg. & Power Co	443,604,762	67,881·37	470,209,975	71,952 55	913,814,737	139,833·92
Canadian Niagara Power Co., Ltd	328,721,566	50,301·69	292,898,742	44,820·00	621,620,308	95,121·69
Canadian Niagara Power Co. (surplus)	182,400	27·91	.....	.....	182,400	27·91
Western Power Co., of Canada	611,365	93·55	237,389,835	36,325·91	238,001,200	36,419·46
Ontario & Minnesota Power, Co. Ltd	17,264,700	2,641·88	5,040,538	771·31	22,305,238	3,413·19
Maine & New Brunswick Elec. Pr. Co	10,164,151	1,555·34	2,863,549	438·18	13,027,700	1,993·52
British Columbia Elec. Ryl. Co	807,572	123·57	152,768,928	23,377·03	153,576,500	23,500·60
West Kootenay Power & Light Co	551,100	84·33	512,739,500	78,460·52	513,290,600	78,544·85
Maritime Electric Co., Ltd	765,522	117·14	1,592,002	243·61	2,357,524	360·75
Southern Canada Power Co	610,608	93·43	12,379,842	1,894·39	12,990,450	1,987·82
International Elec. Co	69,330	10·61	164,990	25·24	234,320	35·85
Frsaer Companies Ltd	3,232,300	494·61	20,358,800	3,115·34	23,591,100	3,609·95
Totals	1,604,212,276	245,480·02	4,680,010,401	716,145·38	6,284,222,677	961,625·40

APPENDIX H

List of Electric Light and Power Companies Registered under the Provisions of the Electricity Inspection Act, during the Fiscal Year ended March 31, 1929

District and Company	Address	Type of Prime Mover	Phases of System	Frequency of System	Generator Voltage	Service Voltages		Number of Meters	
						Power	Lighting	Power	Lighting
Charlottetown—									
R. H. Gordon	Alberton	Water	1-3	60	2,200	220	110		125
Chas. Murray Electric Light Co	Bradalbane	Water	D.C.		110		110		18
Cardigan Electric Company, Ltd	Cardigan	Purchased	2	60	2,200	110	110	4	37
Maritime Electric Company, Ltd	Charlottetown	Steam	1-3	60	2,300	220	110	114	2,614
H. Leard	Crapaud	Water	1-2	60	2,200	110	110		40
Austin A. Scales	Freetown	Water	3	60	2,200	220	110		223
Hunter River Electric Light Co., Ltd	Hunter River	Water	3	60	2,200		110		40
Montague Electric Co., Ltd	Montague	Water	1-3	60	2,300	110	110	70	250
Leards Hydro Electric Plant	Mt. Stewart	Water	2-3	60	2,300		110		25
Charles W. Ives	North Tryon	Water and steam	1-3	60	2,200		110		85
The Town of Souris	Souris	Oil	1-3	60	2,200		110		115
The Town of Summerside	Summerside		3	60	2,200	220	110	39	657
Total Number of meters in District of Charlottetown								227	4,229
Halifax—									
Canada Electric Co., Ltd	Amherst	Water	1-3	60	2,200	2,200/220	110	52	1,636
Town of Annapolis Royal	Annapolis Royal		3	60	2,300		110	2	54
Town of Antigonish	Antigonish	Oil	1-3	60	2,300	2,300	110	18	318
Electric Light Commissioners for town of Aylesford	Aylesford	Purchased	1	60	2,200	110	110	1	76
The Morristown Elec. Light & Power Co	Aylesford	Water	3	60	2,200		110		25
Norman Bethune	Baddeck	Oil	D.C.		115		110		31
Barrington Electric Co., Ltd	Barrington	Water	1-3	60	2,300		110		70
Barr's Corners Electric Light Co	Barr's Corners	Purchased	2	60	2,200		110		24
Somerset Electric Light & Power Co	Berwick	Purchased	3	60	2,200		110		46
Town of Berwick	Berwick	Water	3	60	2,300	220	110	4	211
Annapolis Valley Electric Co., (formerly Bear River Elec. Lt. & Power Co., Paradise West Elec. Co., Bridgetown Elec. Lt. Ht. & Power Co.; & Bridgetown Lt., Ht. & Power Co., Lawrencetown)	Bridgetown		1-3	60	2,300	110/220	110	11	769
Town of Bridgewater	Bridgewater	Water	3	60	2,200	110/550	110	26	741
Water Commissioners	Canning	Purchased	3	60	2,300	220	110	10	165
Town of Canso	Canso	Oil	3	60	2,200	220	110	4	345

Chester Light, Heat & Power Co.	Chester	Water	3	60	2,200	220	110	4	141
Electric Light Comm. of Upper Church St.	Chipman's Corners	Purchased	1	60			110		23
Dartmouth Gas, Elec. Lt., Ht. & Power Co.	Dartmouth	Purchased	1-3	60		220/550	110	53	1,966
Digby County Power Board	Digby	Water	3	60	2,300	220	110	6	178
Town of Digby Light & Power Co.	Digby	Purchased	1-3	60		220	110	20	319
Town of Dominion	Dominion	Purchased	1	25	2,200		110		400
Gaspereau Valley Electric Light Co.	Gaspereau	Purchased	1-3	60	2,300	110	110	5	42
Dominion Coal Co., Ltd.	Glace Bay	Steam	1-3	25	2,200/6,600	550/2,200/6,600	110/220	74	65
Town of Glace Bay	Glace Bay	Purchased	1-2	60	2,200	110	110	13	2,081
Grafton Electric Light & Power Co.	Grafton	Purchased	3	60			110		73
Canard Electric Light & Power Co.	Greenwich	Purchased	1-2	60		110/220	110	4	66
Nova Scotia Light & Power Co.	Halifax	Steam	1-3	60	2,300	220/550/2,300	110	563	11,189
Nova Scotia Power Comm., Mushamush System	Halifax	Water	3	60	6,600	6,600/3,300	110	7	78
Nova Scotia Power Comm., Sheet Harbor System	Halifax	Water	3	60	6,600/2,300	13,200/6,600/2,300	110	2	70
Nova Scotia Power Comm., St. Margaret's Bay	Halifax	Water	1-3	60	13,200	2,200	110	3	22
Sackville River Electric Co., Ltd.	Halifax	Purchased	1-3	60		220/550/2,300	110		299
Town of Hantsport	Hantsport	Purchased	1-3	60		220	110	3	179
Lower Horton Electric Co., Ltd.	Hortonville	Purchased	1-3	60	2,200	110/220	110	8	40
Inverness Railway & Coal Co.	Inverness	D.C.			125		115/125		4
Kentville Electric Commission	Kentville	Purchased	1-3	60	2,200	550/220/110	220/110	20	720
Kingsport Electric Light Co., Ltd.	Kingsport	Purchased	3	60		2,200	110		26
Electric Light Commissioners	Kingston	Purchased	1-3	60	4,000	220	110/220	2	103
Municipality of Clare	Little Brook	Water	1-3	60	2,300	220	110	3	78
The Town of Liverpool	Liverpool	Purchased	1-3	60	2,200	220/550	110		
The Town of Lockeport	Lockeport		1-3	60	2,300		110		100
The Corporation of Louisburg	Louisburg	D.C.					220		101
Lunenburg Gas Co., Ltd.	Lunenburg	Water	3	60	6,600	220/550	110/220	30	674
Town of Mahone Bay	Mahone Bay	Purchased	1	60			110		213
Town of Middleton	Middleton	Water	3	60	2,300	220/550	110	15	337
Milton Hydro Electric Co., Ltd.	Milton	Water	1-3	60	2,300	220	110		202
Town of Mulgrave	Mulgrave	Water	1-3	60	2,300		110		130
Pictou County Power Board	New Glasgow	Steam	1-3	60	2,300	110/220	110	198	3,562
The Brooklyn Light & Power Co.	Newport	Purchased	1	60			110	2	126
Dominion Utilities Co., Ltd.	New Waterford	Purchased	1-3	25	2,200	110/550	110	5	1,400
Oxford Electric Light & Power Co.	Oxford	Water	1-3	60	2,300	220	110		197
The Electric Light System	Parrsboro	Oil	2	60	2,200	104	104	1	263
The Town of Pictou	Pictou	Purchased	1-3	60	2,300	220/550/2,300	100	8	565
Town of Port Hawkesbury	Port Hawkesbury		3	60	2,300		110		86
Riverport Electric Light Commissioners	Riverport	Water	3	60	6,600	220	110	5	232
Sheffield Mills Power & Light Co.	Sheffield Mills	Purchased	1-3	60	2,300		110	1	31
The Town of Shelburne	Shelburne	Water	3	60	2,200	220	110		
South Berwick Electric Light Co.	South Berwick	Water	3	60	2,200		110		32

APPENDIX H—Continued

LIST of Electric Light and Power Companies Registered under the Provisions of the Electricity Inspection Act, during the Fiscal Year ended March 31, 1929

District and Company	Address	Type of Prime Mover	Phases of System	Frequency of System	Generator Voltage	Service Voltages		Number of Meters	
						Power	Lighting	Power	Lighting
Halifax—Continued									
Edison Electric Light & Power Co	Springhill	Purchased	1-3	60		220	110	5	1,044
Acadia Coal Company, Ltd	Stellarton	Steam	1-3	50	3,150	3,150/550	110	2	1
Cape Breton Electric Co., Ltd	Sydney	Steam	1-2	60	2,200	110/220	110/220	211	6,872
Sydney Mines Electric Co., Ltd	Sydney Mines	Steam	1-2	60	2,200	110/220	110/220		
Northumberland Light & Power Co	Tatamagouche		1-3	60	2,300	600/220	110	4	280
Truro Electric Light Commission	Truro	Steam	3	60	2,300	220	110	71	1,408
Waterville & Cambridge Electric Light & Power Co., Ltd	Waterville	Purchased	1	60			110	4	110
Village of Weymouth	Weymouth	Purchased	3	60	2,300	110	110	8	97
The Avon River Power Co., Ltd	Windsor	Water	1-3	60	2,300	2,200/220	110/115	140	1,050
The Wolfville Electric Commission	Wolfville	Purchased	1-3	60		220/110	110	99	486
Western Nova Scotia Electric Co	Yarmouth	Water	1-3	60	2,300	220	110	58	1,368
Total number of meters in District of Halifax								1,775	43,640
St. John—									
Andover & Perth Electric Light Com	Andover	Purchased	1-3	60	11,000	220/110	110	23	175
Maine & N.B. Electrical Power Co., Ltd	Aroostook Jct	Water	1-3	60	1,100	110/220/550	110	5	90
Bathurst Electric & Water Power Co., Ltd	Bathurst	Purchased	2-3	60		220	110	59	776
Bath, Bristol & Florenceville Hydro Elec. Dist	Bristol	Purchased	1-3	60	2,200	220	110	5	285
Town of Campbellton	Campbellton	Purchased	1-3	60		2,200/550/220	110	50	1,250
C. M. Sherwood, Ltd	Centreville	Purchased	1-3	60	33,000/2,200	220	110	2	118
Town of Chatham Light Dept	Chatham	Oil	1-2-3	60	2,300	224	112	16	618
King Lumber Company Limited	Chipman	Steam	D.C		125	110	110		24
Town of Dalhousie	Dalhousie	Gas	1-3	60	2,300	220	110	4	291
Dorchester Penitentiary	Dorchester	Steam	1-3	60	2,300	550	110/115		33
Fraser Companies, Limited	Edmundston	Water & Steam	1-3	60	6,600/600	600/2,300	110/220	32	
Corporation of Edmundston	Edmundston	Water	1-3	60	2,300	110/220/550	110	70	950
Maritime Electric Co., Ltd	Fredericton	Steam	1-2	60	2,200	110/220 or 440 or 2,200	110	57	2,329
The Town of Grand Falls	Grand Falls	Purchased	1-3	60	33,000	550/220/110	110	8	320
Hartland Electric Co., Ltd	Hartland	Purchased	3	60	33,000	220	110	14	228
Lakeville Electric Light & Power Co	Lakeville	Purchased	1	60	2,300	110/220	110	2	40
Limestone Electric Company	Limestone	Purchased	1	60	33,000	110/220	110	1	2
A. & R. Loggie Company, Ltd	Loggieville	Steam	D.C		110	110	110		6

Canadian Cottons	Marysville	Steam		1-3	60	2,200	110	110	1	270
Canadian Pacific Railway Co	McAdam	Steam		3	60	2,200			2	
McAdam Electric Light Com	McAdam	Purchased		3	60	2,200		110		330
The Minto Coal Company, Ltd	Minto	Steam		1-3	60	2,200	220	110		96
Moncton Tramways Elec. & Gas Co., Ltd	Moncton	Purchased		1-2	60	2,300	550/220/110	110	93	4,599
Canadian Cottons Limited	Montreal	Water		3	60	576	575		1	
Town of New Castle	Newcastle	Steam		1-2	60	2,200	220/110	110	15	610
Gould Electric Company	Presque Isle, Maine	Purchased		1-3	60	3,300	110/220	110		
(Serving)	Clair, N.B								16	90
Donald Fraser	Plaster Rock	Oil		3	60	2,300	220/110	220/110		50
Fred Magee Limited	Port Elgin	Steam	D.C			220		220		2
Village of Port Elgin	Port Elgin	Oil	D.C			220		220		55
Richibucto & Ruxton Elec. Light Com	Richibucto			1-3	60	2,000	220	110	3	112
The Eastern Elec. & Development Co	Sackville	Purchased		1-3	60	2,200	220/2,200	110/220	14	509
Algonquin Hotel	St. Andrews	Steam		3	60	110	2,200	210/110	2	2
St. Andrews Elec. Lt. & Pr. Co., Ltd	St. Andrews	Steam		3	60	2,200	220/110	110	5	233
St. Basile Electric Company, Ltd	St. Basile	Water		1	60	110	110	110	2	25
St. George Pulp & Paper Company	St. George	Water	D.C			550	550		1	
Town of St. George Corporation	St. George	Purchased		3	60	2,200				200
New Brunswick Elec. Power Com	St. John	Purchased		3	60	33,000				
N.B. Electric Power Commission	St. John	Water		3	60	13,200	550/220	220/110	24	2,654
(Serving)	Westfield Dist.								5	590
	Fairvale Dist.									183
	Hampton Dist.								6	244
	Norton- Apohaqui District								1	324
	Petitcodiac District								5	495
	Shediac Dist.-Dorchester								2	818
	Meters for wholesale Power								5	
New Brunswick Power Company	St. John	Steam		1-3	60	2,300	2300/220/110 A.C. 250 D.C.	110	333	6,476
Power Com. of City of St. John	St. John	Water		1-3	60	13,100	220/550	110/220	122	9,199
The St. John River Power Co	St. Leonard	Purchased		1	60			110	2	146
J. A. Vaughan	St. Martins	Oil		1-3	60	550	550	110		7
Calais Street Railway	St. Stephen	Purchased		1-3	60	2,200	220	110	7	6
The Maritime Electric Co., Ltd	St. Stephen	Purchased		3	60	2,300	110/220	110	34	1,259
Town of Sussex	Sussex	Purchased		1-3	60		220	110	35	538
Van Buren Light & Power District (Supply)	Van Buren, Maine St. Leonards Electric Co.	Purchased		3	60	2,300	2,300		3	
Woodstock Electric Ry. Lt. & Power Co	Woodstock	Purchased		1-3	60	33,000	2,200/550/220/110	220/110	18	973
Carleton Electric Company	Woodstock	Purchased		3	60	33,000			4	
Total number of meters in District of St. John									1,085	35,976

APPENDIX H—Continued

LIST of Electric Light and Power Companies Registered under the Provisions of the Electricity Inspection Act, during the Fiscal Year ended March 31, 1929

District and Company	Address	Type of Prime Mover	Phases of System	Frequency of System	Generator Voltage	Service Voltages		Number of Meters	
						Power	Lighting	Power	Lighting
Quebec—									
Philibert Langlois	Armagh	Purchased	3	60			110	1	93
Duke-Price Power Co., Ltd	Arvida	Water	3	60	13,200	13,200			15
La Cie Electrique Baie St. Paul	Baie St. Paul		1-2	60	2,300	550	110		269
La Ville de Bagotville	Bagotville		1-3	60	2,400	550/110	110	2	463
Le Pouvoir Electrique Lapointe Enr	Bergeronnes		3	60	2,200		110		17
Bonaventure Pulp & Paper Co	Chandler		1-3	60	550	550	110		247
La Cie Electrique du Saguenay	Chicoutimi	Purchased	3	60	12,500	550	110	75	4,500
The Lake St. John Light & Power Co	Desbiens	Purchased	1-3	60	2,200	550	110	2	
The Lake St. John Power & Paper Co	Dolbeau	Purchased	1-3	60		2,200/550	110	24	335
						220			
Donnaconna Paper Co., Ltd	Donnacona	Water	3	60	2,200/550	2,200/550	110/220	10	900
Chaleur Bay Power Limited	Grand'Mère		3	60	2,200		110/220		200
Le Boulavard St. Dominique	Jonquière	Purchased					220		60
Corporation de la Ville de Jonquière	Jonquiere	Purchased	3	60	2,300	2,300	230	12	742
La Societe d'Electricite	Jonquière	Purchased	1-3	60	2,200	220	110		40
La Societe d'Eclairage	Jonquière	Purchased	1	60	2,200	110	110		21
Price Brothers & Co., Ltd	Kenogami	Water	1-3	60	6,600	2,200	110	15	1,100
Alcoa Power Company, Ltd	Kenogami	Purchased	3	60		440/2,200	110	1	13
Labrador Electric & Pulp Co., Ltd	La Malbaie	Water	3	60	4,400	550	110/220		742
La Cie Electrique du Lac Bouchette	Lac Bouchette	Water	2-3	60	1,100	110	115		33
Davie Shipbuilding & Repairing Co., Ltd	Lauzon	Purchased	1-3	60	10,500	550	110/220	1	
La Cie Electrique de Charlevoix	Les Eboulements	Water	2-3	60	2,200	2,200/220/	110		56
						110			
Price Brothers & Co., Ltd	Matane	Water	3	60	2,200	220/550	110		
St. Francis Light & Power Co	Montreal	Water	3	60	15,000	550/220	150/230	227	8,258
La Municipalite du Village de Neuville	Neuville	Purchased	1	60	2,700	220	115	2	123
Ludger Demers	Notre Dame de la Dore		1-3	60	550		110		9
La Cie Electrique Plessis	Plessisville	Purchased	1-3	60		2,200/550	120	50	635
Port Alfred Pulp & Paper Corp	Port Alfred	Purchased	1-3	60	12,000	550	110/220	1	
Quebec Harbour Commissioners	Quebec	Purchased	3	60			110	24	
Quebec Power Company	Quebec	Water	2-3	60	2,400/5,500	66000/10,500	220/110	1,419	37,435
					6,600	5,500/2,400/			
						550/220/110			
La Compagnie de Pouvoir du Bas St. Laurent	Rimouski		1-3	60	2,300/4,000	550/220	115	70	4,356
Price Brothers & Co., Ltd	Riverbend	Purchased	1-3	60	13,200	500	110		85

La Cie Electrique Rivière à Pierre, Ltée.	Rivière à Pierre	Water	2-3	60	2,300	550	110	3	38
La Cité de Rivière du Loup	Rivière du Loup		2-3	60	2,300	550/220/110	110	26	1,495
Arthur Fillion	Robertsonville	Purchased	2-3	60		550	110	1	72
Hector Piche	St. Basille	Purchased	1	60	2,200	110	110	1	124
Joseph Longchamps	St. Henri		1-3	60	2,200		110		12
La Ville de St. Joseph d'Alma	St. Joseph d'Alma	Purchased	1-3	60	13,200	550	110	30	870
La Compagnie d'Energie									
La Cie de Laiterie de St. Pierre	St. Pierre	Purchased	1-3	60	6,600	550/220	110	4	165
Electrique St. Simeon	St. Siméon		3	60	2,200		110		
La Corporation Electrique de Temiscouata	Trois Pistoles	Water	3	60	2,300	550/220/110	110	3	81
Total number of meters in District of Quebec								2,019	63,589
Three Rivers—									
Howard Smith Paper Mills Ltd	Crabtree Mills		1-3	60	550		110		20
Louis Joseph Dostaler	Grand'Mere	Purchased	3	60			2,200/110		220
La Cité de Grand'Mère	Grand'Mere	Purchased	1-3	60	110	110/220/250/550	110	30	1,500
La Corporation de la Cité de Joliette	Joliette	Purchased	1-3	60	2,200	2200/550/220	110	47	2,090
Brown Corporation	La Tuque		1-3	60	2,300	550	110/220	351	1,158
Electric Service Corporation	Montreal	Purchased	1-3	30 & 60		2,200/550	110	391	10,776
(Serving)	Shawinigan Falls					220		83	3,300
	Shawinigan Bay							1	230
	La Gabelle								26
	St. Etienne des Gris							1	61
	Valmont (Mont Carmel)								37
	Almaville							3	383
	St. Jean des Piles								39
	Ste. Flore Est								110
	Ste. Flore							1	128
	Grand'Mere							7	
	St. Tite							15	362
	Ste. Thecle							7	190
	St. Severin							2	58
	St. Adelphe							3	116
	St. Jacques des Piles							2	64
	St. Timothée								37
	Hervey Junction								29
	Berthierville							26	497
	Lavaltrie							7	90
	St. Cuthbert							1	72
	Lanoraie Village							1	122
	St. Sulpice							1	76

APPENDIX H—Continued

LIST of Electric Light and Power Companies Registered under the Provisions of the Electricity Inspection Act, during the Fiscal Year ended March 31, 1929

District and Company	Address	Type of Prime Mover	Phases of System	Frequency of System	Generator Voltage	Service Voltages		Number of Meters	
						Power	Lighting	Power	Lighting
Three Rivers—Continued									
Electric Service Corporation—*Concluded.*									
(Serving)	Nicolet							27	291
	St. Gregoire							9	95
	St. Leonard							5	104
	Annaville (St. Celestin)							1	35
	Ste. Monique							2	44
	St. Wenceslas							2	26
	Becancour							2	50
	Gentilly							1	74
	Purreville							8	186
	La Baie de Febvre							8	104
	Yamaska							3	81
	St. Francois du Lac							1	43
	Odanak								9
	Victoriaville							55	1,126
	Arthabaska							14	246
	Warwick							14	192
	Louisville							18	470
	St. Justin							3	83
	St. Barthelemy							3	156
	St. Viateur								10
	Maskinonge							6	150
	Ste. Ursule							3	63
	St. Leon							1	47
	Joliette							10	
	St. Felix de Valois							7	164
	Ste. Elizabeth							2	70
	St. Jean de Matha							1	64
	Crabtree Mills							2	72
	St. Thomas							1	57
	St. Ambroise							1	109

	Ste. Melanie								44
	St. Paul de Joliette								22
	St. Cleophas							1	
	Ste. Emelie							2	12
	Lanoraie Jct								
	St. Norbert							4	23
	St. Gabriel de Brandon							13	290
	St. Charles de Mandeville								34
	St. Michel des Saints								48
	St. Damien								26
	St. Marie Salomé								29
Shawinigan Water & Power Company	Montreal	Water	2 & 3	30 & 60	13,200/6,600 /2,200	60,000		100	
The Sorel Light & Power Co., Ltd	Sorel	Purchased	1–3	60	11,000	550	220/110	95	3,218
Serving	Sorel							53	1,870
	St. Joseph de Sorel							6	303
	Ste. Anne de Sorel								37
	St. Ours							6	141
	St. Roch							1	43
	Contrecœur							10	162
	Verchères							8	132
	Varennes							2	137
	Boucherville							5	201
	St. Denis							3	112
	St. Antoine							1	50
	Ste. Théodosée								10
North Shore Power Company	Three Rivers	Purchased	1–3	30 & 60		550	110/220	352	14,445
Serving	Banlieue & Pte-du-Lac							2	258
	Batiscan							5	151
	Champlain							1	163
	Charette								100
	Cap-de-la-Madeleine							33	1,937
	Deschambault								92
	Grondines								80
	Lachevrotière								16
	La Pérade							2	239
	Montauban							2	76
	N. D. des Anges							2	108
	Piles Jonction								4
	Portneuf							8	291
	St. Alban							4	102

APPENDIX H—Continued

LIST of Electric Light and Power Companies Registered under the Provisions of the Electricity Inspection Act, during the Fiscal Year ended March 31, 1929

District and Company	Address	Type of Prime Mover	Phases of System	Frequency of System	Generator Voltage	Service Voltages		Number of Meters	
						Power	Lighting	Power	Lighting
Three Rivers—Concluded									
North Shore Power Company—*Concluded.*									
Serving	Ste. Angèle de Laval							2	140
	St. Barnabé							1	111
	St. Bazile							3	18
	St. Boniface								101
	St. Casimir							22	342
	St. Elie de Caxton								53
	Ste. Genevieve							6	128
	St. Léonard								34
	St. Louis de-France							2	17
	St. Maurice								137
	Ste. Marguerite's Road							2	65
	St. Marc							13	244
	St. Narcisse							3	181
	St. Paulin							4	104
	St. Prosper								111
	St. Raymond							13	443
	St. Sévère							1	141
	St. Stanislas							1	146
	St. Thuribe								28
	St. Ubald								48
	Trois-Rivières							220	8,068
	Yamachiche								168
Total number of meters in District of Three Rivers								1,366	33,427
Montreal—									
Wilfrid Lorrain	Abord à Plouffe	Purchased	1	60			110		21
La Municipalité du village d'Asbestos	Asbestos	Purchased		30	2,200	220	110	12	800
Ascot Tile and Brick Company, Ltd	Ascot Corner	Purchased	1	60	550	550	110		20
La Ville de Beaconsfield	Beaconsfield	Purchased	3	60		2,200	2,200/110		91

La Ville de Beloeil	Beloeil	Purchased	2-3	62		550	110	10	503
The Sorel Light & Power Co., Ltd	Boucherville	Purchased	1-3	60	11,000	550	220/110	5	201
The Belmont Park Company, Ltd	Belmont	Purchased	2-3	60	2,200	220	110	17	25
Chambly Power Corporation	Chambly Canton	Purchased	1-2-3	60	2,100	2,100/550/220/110	110	55	460
Le Compagnie d'Electricité Rurale Ltée	Coaticook	Purchased	2-3	60	2,300	550	110		74
Corporation of Coaticook	Coaticook	Water	1-3	60	2,300	550/220/110	110	1	1,080
La Municipalité du Village de Danville	Danville	Purchased	3	30		2,200/220/110	110	13	390
La Ville de Dorval	Dorval	Purchased	3	60		2,200/550/220	110		580
Canadian Celanese Limited	Drummondville	Purchased	3	60	4,000	4,000/550	110/220	18	14
La Corporation d'Aqueduc et d'électricité de Ferme-Neuce	Ferme-Neuce	Purchased	2-3	60	6,600		110		42
Corporation of Town of Greenfield Park	Greenfield Park	Purchased	3	60		2,200	110	1	365
La Corporation de la Cité de Lachine	Lachine	Purchased	3	60	13,000	1,100/550/220	110	115	3,000
Corporation Ville de Laprairie	Laprairie	Purchased	1-3	60	2,200	550	110	18	460
La Corporation de la Ville de Magog	Magog	Water	2	60	2,400	2,200	110		1,203
Dudswell Electric Company, Ltd	Marbleton	Purchased	1-3	60	2,200	550	110	6	165
La Ville de Marieville	Marieville	Purchased	1-2	60	2,200	550	110		460
La Corporation de la Ville de Megantic	Megantic	Water	3	60	6,600	550	110	11	675
Beauharnois Electric Company, Ltd. (Serving)	Montreal	Purchased	1-3	60		2,200/550/220	110	100	5,825
	Beauharnois							12	509
	Melocheville								32
	Maple Grove								17
	DeLery town							5	121
	Chateauguay town							8	210
	Parish of St. Joachim							7	101
	Ste. Philomène							1	88
	St. Etienne								19
	Huntingdon							9	448
	Athelstan								79
	Dewittville							1	23
	Howick							1	142
	Ormestown							8	279
	Trout River							2	57
	Valleyfield							3	1,866
	Nouveau Salaberry								56
	Parish of Ste. Cécile								102
	St. Timothée Village								86
	St. Timothée Parish							1	15
	St. Louis de Gonzague							3	136
	St. Stanislas								49
	St. Constant							2	110
	Delson							1	133

APPENDIX H—Continued

LIST of Electric Light and Power Companies Registered under the Provisions of the Electricity Inspection Act, during the Fiscal Year ended March 31, 1929

District and Company	Address	Type of Prime Mover	Phases of System	Frequency of System	Generator Voltage	Service Voltages		Number of Meters	
						Power	Lighting	Power	Lighting
Montreal—Continued									
Beauharnois Electric Company, Ltd.—*Concluded*	Montreal	Purchased	1-3	60		2,200/550/220	110		
(Serving)	Parish of Laprairie							1	41
	Caughnawaga							9	125
	St. Isidore							2	103
	St. Rémi							12	242
	St. Michel								57
	St. Mathieu								19
	St. Edouard								21
	Barrington								3
	St. Chrysostome							5	77
	Ste. Clothilde								12
	Hemmingford							3	112
	Rockburn								1
	Franklin								2
	St. Antoine Abbée								3
	Riverfield								1
	Aubrey								6
	Brosseau Station								16
	St. Hubert							3	122
	St. Lambert Annex								68
	East Greenfield								44
	Springfield Park								24
	St. Lambert-Laprairie								10
	Longueuil Annex							1	38
Canadian Explosives Limited (Serving)	Montreal	Purchased	1-3	60		550	110		
	McMasterville								60
Electric Service Corporation (Serving)	Montreal	Purchased	1-3	60		2,200/550/200	110	86	4,573
	Charlemagne							5	140
	Lachenaie								83

	L'Epiphanie							6	285
	L'Assomption							11	282
	Mascouche							1	153
	Repentigny							1	101
	St. Paul L'Ermite							1	90
	Ste. Thérèse							35	718
	Terrebonne							2	69
	Rosemere							1	194
	Ste. Anne des Prairies							2	155
	Bois des Filions								48
	La Plaine								36
	Ste. Rose							6	465
	St. Francois de Sales							2	136
	St. Janvier							1	75
	Cap St. Martin							1	38
	St. Martin								193
	Canton Belanger							1	28
	Laval sur le Lac							2	82
	St. Elzéar							1	44
	Ste. Dorothée							1	124
	St. Vincent de Paul								169
	Plage Laval								42
	Oka							3	121
	St. Eustache sur le Lac								174
	St. Eustache							3	434
	St. Joseph de Lac								73
	Pointe aux Calumets								21
The Garment Centre Capital Inc	Montreal	Purchased	1-3	60		575	110/220		50
Gatineau Electric Light Co., Ltd	Montreal	Purchased	3	60		550/220	115/230	16	336
Harbour Commissioners	Montreal	Purchased	1-3	62½	12,000	2,300/550	120	50	60
Montreal Light, Heat & Power Co	Montreal	Water and Steam	2-3	60	2,200/4,400 6,600/12,000	115 to 70,000 and 250 D.C.	115/230	5,366	220,562
The Mount Royal Hotel Company, Ltd	Montreal	Purchased	1	63	230/110	230 D.C. 2,200 A.C.	115 D.C. and 110 A.C.	4	17
Le Téléphone et la Lumière de Rivières des Prairies, Ltée	Montreal	Purchased	1-3	60	2,200		110		78
Sherbrooke Street Realty Corporation	Montreal	Purchased		60			220/110		8
The Southern Canada Power Co., Ltd. (Serving)	Montreal	Water	1-3	60	2,200	550	110	*358*	*22,123*
	Abbotsford								58
	Actonvale							7	379
	Ayers Cliff							3	196
	Bedford							2	396

APPENDIX H—Continued

LIST of Electric Light and Power Companies Registered under the Provisions of the Electricity Inspection Act, during the Fiscal Year ended March 31, 1929

District and Company	Address	Type of Prime Mover	Phases of System	Frequency of System	Generator Voltage	Service Voltages		Number of Meters	
						Power	Lighting	Power	Lighting
Montreal—Continued									
The Southern Canada Power Co., Ltd.—									
(Serving)—*Continued*	Beebe							8	232
	Beloeil							3	.....
	Brome							.....	40
	Bromptonville							.....	336
	Bury							.....	152
	Canrobert							.....	49
	Capelton							.....	25
	Clarenceville							.....	50
	Compton							.....	90
	Cookshire							5	262
	Cowansville							5	448
	Drummondville							27	1,296
	Dunham							3	97
	East Angus							7	751
	East Farnham							2	47
	Eastman							.....	62
	Eaton Corner							.....	25
	Emileville							.....	33
	Eustis							2	19
	Farnham							12	972
	Foster							2	83
	Frelighsburg							.....	73
	Granby							29	2,016
	Graniteville							6	24
	Hatley							.....	38
	Henryville							5	50
	Huntingville							.....	34
	Iberville							12	671
	Kingsbury							.....	41
	Knowlton							2	387
	L'Acadie							.....	35
	Lennoxville							20	606
	Libbytown							.....	4
	Magog							2	.....
	Massawippi							.....	18

Milbourne							1	110
Mont St. Hilaire								47
North Hatley							5	254
Orford Lake								24
Pike River								15
Providence								275
Reedville							1	29
Richmond							6	751
Rock Island							9	388
Rougemont								132
Roxton Falls							1	110
Roxton Pond							2	101
Sawyerville								126
South Durham								95
Stanbridge East							2	73
Stanbridge Station							2	30
Stanstead							4	182
Stottsville								19
Sutton							9	282
Sutton Jct								18
Sweetsburg								83
Ste. Angèle							1	62
St. Antoine							3	67
St. Barnabé							1	60
St. Blaise								52
Ste. Brigide								27
St. Césaire							4	241
St. Cyrille							2	92
St. Damase							1	50
St. Dominique								77
St. Germain							5	86
St. Grégoire								24
Ste. Hélène								53
St. Hilaire							1	94
St. Hughes							1	124
St. Hyacinthe							51	2,873
St. Johns							47	2,584
St. Josephs (Drummond)								308
St. Joseph (St. Hyacinthe)								139
St. Jude							1	61
St. Liboire							1	88
St. Luc								23
Ste. Madeleine							3	90
St. Mathias								49
St. Paul								10

APPENDIX H—Continued

LIST of Electric Light and Power Companies Registered under the Provisions of the Electricity Inspection Act, during the Fiscal Year ended March 31, 1929

District and Company	Address	Type of Prime Mover	Phases of System	Frequency of System	Generator Voltage	Service Voltages		Number of Meters	
						Power	Lighting	Power	Lighting
Montreal—Concluded									
The Southern Canada Power Co., Ltd.—*Concluded.*									
(Serving)	St. Pie							1	188
	St. Pierre								70
	Ste. Rosalie							3	145
	St. Sébastien								34
	St. Simon							1	58
	Upper Melbourne							1	74
	Upton							1	122
	Warden								33
	Waterloo							12	527
	Waterville							9	179
	Ways Mills							1	21
	West Brome								30
	West Shefford							1	99
South Shore Light, Heat & Power Corporation	Montreal	Purchased	2–3	60		550/220/110	110	14	345
South Shore Services, Limited	Montreal	Purchased	1–3	62	2,300	550	110		105
South Shore Light, Heat & Power Corporation	Montreal	Purchased	2–3	60		110/220/550	110	6	240
Public Utilities Vermont Corporation	Newport, Vt., U.S.A.	Purchased	1	60		110/220	110	5	79
(serving)	Abercorn							5	52
	St. Armand								27
Wallace Sandstone Quarries, Limited	Philipsburg		2–3	60		550	110		82
La Ville de Pointe Claire	Pointe Claire	Purchased	1–3	60	2,200	520/110	110/220	10	1,390
Laurentian Water & Power Company	Rapide de l'Orignal	Water	1–3	60	2,300	110/220/440/550	110	2	276
Ville Ste. Agathe des Monts	Ste. Agathe des Monts	Water	2–3	60	2,200	220/550	110	97	629
La Corporation de Ste. Anne de Bellevue	Ste. Anne de Bellevue	Purchased	1–3	60		2,300/550/220/110	110	118	642
The Pierrefonds Electric Company, Ltd.	Ste. Geneviève	Purchased			2,300	550	110		443
Corporation of Village of St. Hilaire	St. Hilaire	Purchased	1–3	60		220	110		209

Mde. Jos. Vauchesleing	Ste. Jovite Station	Purchased	3	60	2,300		110	1	137
The City of St. Lambert	St. Lambert	Purchased	3	60	2,300	220/550/2300	110	16	1,514
James Gordon Dunn	Ste. Martine	Water	1-3	60	2,400	550	110		190
L'Usine électrique	St. Roch L'Achigan	Water	1	60	2,200		110		
La Municipalité de St. Vincent de Paull	St. Vincent de Paul	Purchased	1-3	60	2,300	2,300	110	3	350
Village of Senneville	Senneville	Purchased	2-3	60	2,200/550/220/110	2,200/550/220/110	110	14	85
Sherbrooke Railway & Power Company	Sherbrooke	Water	3	60	2,200	550			
City of Sherbrooke	Sherbrooke	Purchased	1-3	60	6,600/2,300	2,200/550	110	145	7,361
La Ville de Terrebonne	Terrebonne	Purchased	1-3	60	2,200	220/110	110	115	470
A Meilleur	Val Barrett	Water	3	60	2,200		110		50
Corporation of City of Verdun	Verdun	Purchased	3	60/63	2,300	2,300/550/440/220/110	110	134	5,569
City of Westmount	Westmount	Purchased	1-3	60	2,300	550	110	656	3,866
La Corporation de la Ville de Windsor	Windsor	Purchased	2-3	60		220	110	13	500
Total number of meters in District of Montreal								7,611	288,853
Ottawa (in Province of Ontario)—									
Public Utilities Commission	Alexandria	Purchased	3	60	2,300	550/220	115	15	398
Public Utilities Commission	Almonte	Water	1-3	60	2,200	550	110	18	654
The Apple Hill Hydro System	Apple Hill	Purchased	1-3	60		220	110	1	52
The Galetta Elec. Pr. & Milling Co., Ltd.	Arnprior	Water	1-3	60	2,200	550	110	9	896
Serving	Galetta							2	17
	Kinburn							3	54
	Pakenham							0	113
	Carp							5	138
	South March							0	20
	Braeside							5	73
	Sand Point								12
Barry's Bay Electric Light Company	Barry's Bay	Steam & Oil	1-3	60	2,200		110/220		63
The Public Utility Commission	Carleton Place	Purchased	1-3	60	4,400	2,200/550 /110	110/220	29	1,062
The Cardinal Electric Light Co., Ltd	Cardinal	Steam	3	60	2,200	220/110	220/110	1	243
Hydro Electric Commission	Casselman	Purchased	1	60			110		37
J. N. Coupal	Casselman	Water	3	60	2,300	440/550/110	110	1	
Chesterville Hydro Elec. System	Chesterville	Purchased	1-3						
Village of Cobden	Cobden	Water	3	60	2,300	550	110	2	150
Stormont Elec. Lt. & Pr. Co., Ltd	Cornwall	Purchased	1-3	60	2,300	220/550	110/220		3,550
St. Lawrence Power Company, Ltd	Cornwall	Water	3	60	2,200	11,000/550	110	9	456
Serving	Cornwall							7	74
	Mille Roches							1	146
	Moulinette								57
	Dickinson's L'd'g								32
	Wales								
	Lunenburg								25
	St. Andrews								19
	Farran's Point								7
	Aultsville							1	36

APPENDIX H—Continued

LIST of Electric Light and Power Companies Registered under the Provisions of the Electricity Inspection Act, during the Fiscal Year ended March 31, 1929

District and Company	Address	Type of Prime Mover	Phases of System	Frequency of System	Generator Voltage	Service Voltages		Number of Meters	
						Power	Lighting	Power	Lighting
Ottawa—Concluded									
A. Mills	Eganville	Water	1	60	2,300	220	110	1	110
Finch Hydro Electric System	Finch	Purchased	1-3	60		220	110	1	96
Canadain International Paper Co	Hawkesbury	Purchased	3	60	16,500	550	110	2	59
Beach Rural Electric System, Ltd	Iroquois	Water	1-3	60	2,200	220	110	4	320
Corporation of Iroquois	Iroquois	Water	1-3	60	2,200	110/220/550	110/120	25	300
Kemptville Hydro Electric Com	Kemptville	Water	1-3	60	26,000	220	110/220	7	330
Public Utilities Commission	Lanark	Purchased	1	60	2,200	220	110	2	132
Lancaster Public Utilities Com	Lancaster	Purchased	1	60		220	110/220	1	105
Police Trustees	Martintown	Purchased	1	60	2,200		110		50
Hydro Electric Power Com	Maxville	Purchased	1	60		2,200	110/220	2	172
The Rideau Power Co., Ltd	Merrickville	Water	1-3	60	600	600	110/220		200
Judson Watchorn	Merrickville	Water	1-3	60	10,000	220	110		8
The Morrisburg Electric Lt. & Pr. Co	Morrisburg	Water	1-3	60	2,200	220/550	110	6	446
Ottawa Electric Company	Ottawa	Water	2-3	60	11,000/23,000	550	107	538	25,180
Gatineau Electric Light Co., Ltd	Ottawa	Water	1-3	60	2,200	2,200/550	110	23	1,117
Serving	Alfred							2	
	Caledonia								4
	Hawkesbury							16	688
	L'Orignal								89
	Rockland							1	
	St. Eugene							1	70
	Vankleek Hill							3	266
Ottawa Hydro Electric Commission	Ottawa	Water	1-3	60	11,000	440/550	110	178	13,006
The Pembroke Electric Light Co., Ltd	Pembroke	Water	1-3	60	2,500	2,200	110	10	2,173
Perth Hydro Electric System	Perth	Purchased	1-3	60	4,400	2,200/550/220	110/220	22	988
Water and Light Commission	Prescott	Purchased	1-3	60		220/110	110	19	820
Calabogie Light & Power Company	Renfrew	Water	1-3	60	6,600	550	110	3	93
Serving	Barryvale								9
	Calabogie							1	55
	Horton								27
	McNab								2
	Renfrew							2	
Renfrew Municipal Light Dept	Renfrew	Purchased	1-2-3	60	2,200	110/220/440/550	110/220		1,220

Hydro Electric System	Richmond	Purchased	1	60			110/220		67
Corporation of Town of Rockland	Rockland	Water	3	60	6,600	440/220/500	110/220	3	405
Hydro Electric System	Russell	Purchased	3	60		220	110		128
Smith's Falls Hydro Electric System	Smiths Falls	Purchased	1-3	60	26,400	26,400	110	40	1,770
Hydro Electric Power Com	Toronto							38	929
(Serving)	Apple Hill R.P.D.		1-3	60	4,160	220	110/220	4	76
	Dalhousie Lake			60			110/220		4
	Deeks		3	60		600		2	
	Chesterville R.P.D.		1-3	60	4,160	220	110/220	18	187
	Cornwall Trans. Station		3	60		44,000		3	
	Martintown R.P.D.		1-3	60	4,160	220/550	110/220	5	88
	Maxville R.P.D.		1-3	60	4,160	220	110/220		1
	Nepean R.P.D.		1-3	60		220	110/220	2	481
	Prescott R.P.D.		1-3	60		220	110/220	1	80
	Smiths' Falls R.P.D.		1	60			220/110		4
	Williamsburg		1	60	2,300	220	110/220	3	8
Williamsburg Hydro Elec. System	Williamsburg R.P.D.	Purchased	1	60	2,200	220	110	1	67
Winchester Hydro Elec. System	Winchester	Purchased	1-3	60		220	110	3	334
Ottawa (in Province of Quebec)—									
Dominion Cartridge Co. Ltd	Brownsburg	Water & Steam	1-3	60	550	550	110/220		7
The James Maclaren Company, Ltd	Buckingham	Water	1-3	60	2,200	550/220	110	5	20
G. E. Higginson	Calumet	Water	1-3	60	1,100	110	110		23
F. T. Cross	Farm Point	Water	1-3	60	4,400	550	110		184
The Pontiac Power & Dev. Co., Ltd	Fort Coulonge	Water	3	60	2,200		110		90
The Argenteuil Lumber Co., Ltd	Morin Heights	Water	1	60	1,100		110		39
Gatineau Power Company	Ottawa							31	2
(Serving)	Bell Falls	Water	3	60	2,300			1	
	Bryson	Water	3	60	6,600				
	Blanche Falls	Water	3	60	6,600			1	
	Chelsea Falls	Water	3	25/60	6,600				
	East Templeton							5	
	Farmer,s Falls	Water	3	25/60	6,600			1	
	High Falls	Water	3	60	6,600				
	Hull (No. 1)	Water	3	60	11,000			4	
	Hull (No. 2)	Water	3	60	2,200			5	2
	L'Annonciation	Water	3	60	2,300			1	
	Magnan Chute	Water	3	60	6,600			2	
	Maniwaki	Water	3	60	2,300			1	
	Paugan Falls	Water	3	25	6,600			1	
	Ripon	Water	3	60	2,300			1	
	Ste. Adele	Water	3	60	6,600			1	
	St. Jerome	Water	3	60	6,600			2	
	St. Jerome (Wilson)	Water	3	60	2,300			1	
	Table Falls	Water	3	60	11,000			1	
	Val Tetreau							3	

APPENDIX H—Continued

LIST of Electric Light and Power Companies Registered under the Provisions of the Electricity Inspection Act, during the Fiscal Year ended March 31, 1929

District and Company	Address	Type of Prime Mover	Phases of System	Frequency of System	Generator Voltage	Service Voltages		Number of Meters	
						Power	Lighting	Power	Lighting
Ottawa (in Province of Quebec)—Continued									
Gatineau Electric Light Co., Ltd.	Ottawa	Water	1-3	60	2,200	2,200/550	110	225	15,086
(Serving)	Angers						110/220		41
	Arundel						110/220		47
	Aylmer						110/220/550	3	760
	Burbridge						110/220		23
	Bouchette						110/220/550	1	36
	Blue Sea						110/220		14
	Belle Plage						110/220		64
	Belle Riviere						110/220/550	1	46
	Brownsburg						110/220		339
	Campbell's Bay						110/220		143
	Chelsea						110/220		42
	Calumet Island						110/220		35
	Cascades						110/220		58
	Cheneville						110/220		33
	Cote-Le-Boucane						110/220		10
	Como						110/220		103
	Coteau Station						110/220	2	208
	Coteau Landing						110/220		77
	Coteau du Lac						110/220/550	1	71
	Carillon						110/220		44
	Cedars						110/220		133
	Choisy						110/220		20
	Cushing						110/220		17
	Deschenes						110/220/550	6	169
	East Templeton						110/220/550	2	39
	Fassett						110/220/550	1	43
	Gatineau Point						110/220		18
	Gatineau Div. No. 4						110/220		281
	Greece's Point						110/220		10
	Gracefield						110/220	3	78
	Grenville						110/220	2	106
	Hudson Heights						110/220		212
	Harrington						110/220	1	20

Hudson						110/220	3	148
Hull						110/220/550	51	3,294
Huberdeau						110/220		43
Ironsides						110/220	1	18
Ivry						110/220		24
Ile Perrot						110/220		84
Isle Cadieux						110/220		7
Kingsmere						110/220		5
Kirk's Ferry						110/220		16
Kazuabazua						110/220		21
Lesage						110/220		17
Lecordon						110/220		33
Lachapelle						110/220		19
L'Annonciation						110/220		117
Laurentides						110/220/550	13	384
Lacolle						110/220	3	125
Low						110/220	1	43
Lachute						110/220/550	10	817
Nantel						110/220		13
Maniwaki						110/220/550	19	251
Montcalm						110/220		29
Montebello						110/220		142
Mont Rolland						110/220/550	1	134
New Glasgow						110/220/550		55
Papineauville						110/220/550	4	118
Plaisance						110/220		14
Piedmont						110/220		14
Pointe Fortune						110/220		50
Point-au-Chene						110/220		16
Portage						110/220/550	1	10
Ripon						110/220	2	40
Rawdon						110/220/550	6	200
Rigaud						110/220/550	10	192
Shawbridge						110/220/550	2	97
Sherrington						110/220/550	1	32
Staynerville						110/220		14
Shawville						110/220		189
St. Agathe						110/220/550	2	22
St. Alexis						110/220	6	194
St. Adele								131
St. Augustin						110/220	3	60
St. Antoine—see St. Jerome						110/220/550	2	139
St. Andrews								
St. Andre Avellin						110/220/550	7	106
St. Benoit						110/220		55
St. Calixte						110/220		39
St. Clet						110/220/550	2	91
St. Canut						110/220/550	1	49

APPENDIX H—Continued

LIST of Electric Light and Power Companies Registered under the Provisions of the Electricity Inspection Act, during the Fiscal Year ended March 31, 1929

District and Company	Address	Type of Prime Mover	Phases of System	Frequency of System	Generator Voltage	Service Voltages		Number of Meters	
						Power	Lighting	Power	Lighting
Ottawa (in the Province of Quebec)—Concluded									
Gatineau Electric Light Co., Ltd.—*Continued.*									
(Serving)	St. Esprit						110/220/550	6	207
	St. Faustin						110/220	1	92
	St. George						110/220		34
	St. Hermas						110/220		94
	St. Jacques						110/220/550	6	382
	St. Jacques le Mineur de Napierville						110/220		9
	St. Julienne						110/220/550	1	78
	St. Jerome						110/220/550	22	1,797
	St. Justine de Newton						110/220		35
	St. Liguori						110/220/550		18
	St. Marguerite						110/220		103
	St. Marthe						110/220		23
	St. Monique						110/220	1	81
	St. Placide						110/220		73
	St. Philippe						110/220	2	34
	St. Polycarpe						110/220/550	2	90
	St. Phillippe D'Argenteuil						110/220	2	34
	St. Phillippe de Napierville						110/220	1	41
	St. Roche						110/220		62
	St. Scholastique						110/220/550	3	156
	St. Sophie						110/220		18
	St. Sauveur						110/220		66
	St. Zotique						110/220		54
	Thurso						6,600	1	
	Val David						110/220		35
	Vaudreuil Village						110/220/550	1	124
	Val Morin						110/220	1	144
	Vaudreuil Station						110/220/550	1	151

The National Hydro Elec. Co., Ltd.	Pointe Fortune	Water		3	60	2,200		110		
Municipalité de la Pointe Gatineau	Pointe Gatineau	Purchased		1	60	2,200	110	110	2	180
Quyon Milling Co., Ltd.	Quyon	Water		3	60	110/220		110		37
The Corporation of Village of Thurso	Thurso	Purchased		3	60	6,600/220/110			7	23
Total number of meters in District of Ottawa									1,299	74,516
Belleville—										
Bancroft Light & Power Company	Bancroft	Water	D.C.			125		125		
Alexander Irwin	Beaverton	Purchased		3	60	1,100	220	110/220	10	433
(Serving)	Brechin	Purchased		3	60	1,100	220	110/220	4	60
	Kirkfield	Purchased		3	60	1,100	220	110/220	1	30
Hydro Electric Power Com. of Ont.	Belleville	Water		3	60	44,000	550/250/110	110/220	85	3,336
Hydro Electric Power Com. of Ont.	Bloomfield	Purchased		1-3	60	2,400	110/220	110	8	165
Electric Light Commission	Bobcaygeon	Water		1-3	60	2,200	110/220	110		245
Hydro Electric Power Com. of Ont.	Bowanville	Purchased		1-3	60		220/440/550	110/220	38	1,137
The Public Utilities Commission	Brockville	Purchased		1-3	60	2,300	550/220/110	220/110	68	2,718
Hydro Electric Power Com. of Ont.	Brighton	Purchased		1-3	60	44,000	220/550	110	12	575
Water and Light Commission	Campbellford	Water		1-3	60	2,400	4,000/2,400	110/220	13	953
Sherman Roy Belfry	Cannington	Purchased		1-3	60		220	110/220	12	319
Hydro Electric Power Com. of Ont.	Cobourg	Purchased		1-3	60		220/440/550/2,200	110/220	40	1,312
G. M. Peebles Estate	Colborne	Purchased		1	60	44,000	220	110	5	285
Deloro Smelting & Refining Co., Ltd.	Deloro	Purchased		1-3	60	44,000	550	220/110		38
James Hoffman	Delta	Water		3	60	2,200		110		65
Hydro Electric Power Com. of Ont.	Deseronto	Purchased		1-3	60		2300/550/220	115	11	343
Frankford Electric Light Co., Ltd.	Frankford	Purchased		1-3	60	6,600/2,200	220	110	8	260
Bd. of Water, Light & Power Commissioners	Fenelon Falls	Water		1-3	60	550	550	110	1	317
Gananoque Elec. Light & Water Supply Co., Ltd.	Gananoque	Water and Steam		3	60	2,400/250	550	115	35	937
Dysart Electric Light System	Haliburton	Water		1-3	60	2,300	2,200	110	2	147
Fowlds Company Ltd.	Hastings	Water		1-2	60	2,200	110/220	110		14
Hydro Electric Power Commission	Havelock	Purchased		1-3	60	44,000	550/220	110/220	3	345
Wm. Plunkett	Keene	Water		2	60	2,200		110		
Public Utilities Commission	Kingston	Purchased		1-3	60	2,300	550	110/220	124	5,945
Lakefield Hydro Electric Commission	Lakefield	Purchased		1-3	60	6,600	220/550	110/220	8	380
Lindsay Hydro Electric System	Lindsay	Water		1-3	60	550	550/220	110		
Lyndhurst Electric Plant	Lyndhurst	Water		1-3	60	2,200	200	110		60
Corporation of Madoc Village	Madoc	Purchased		3	60		220	220	10	350
Marmora Local Hydro Commission	Marmora	Purchased		1	60	44,000	110/220	110/220	3	220
Hydro Electric Power Com. of Ont.	Millbrook	Purchased		1	60		110/220	110	1	215
Hydro Electric Power Com. of Ont.	Napanee	Purchased		1-3	60		2300/550/220	115	33	996
J. P. Lett & Bro.	Newboro	Water		1-3	60	4,000	220	110		15
Hydro Electric Power Com. of Ont.	Newburgh	Purchased		1-3	60		2300/550/220	115	3	141
Hydro Electric Power Com. of Ont.	Newcastle	Purchased		1	60		110/220	110/220	3	201
Hydro Electric Power Com. of Ont.	Norwood	Purchased		1-3	60	44,000	550/220	110/220	4	284
J. H. Babcock	Odessa	Water		1-2	100	2,200	110/220	110		42
Hydro Electric Power System	Omemee	Purchased		1-3	60		220	110	4	150

APPENDIX H—Continued

LIST of Electric Light and Power Companies Registered under the Provisions of the Electricity Inspection Act, during the Fiscal Year ended March 31, 1929

District and Company	Address	Type of Prime Mover	Phases of System	Frequency of System	Generator Voltage	Service Voltages		Number of Meters	
						Power	Lighting	Power	Lighting
Belleville—Concluded									
Hydro Electric Power Com. of Ont.	Orono	Purchased	1	60		110/220	110/220	5	191
Hydro Electric Power Com. of Ont.	Oshawa	Water	1-3	60	4,000	550	110/220	95	6,415
Peterborough Utilities Commission	Peterborough	Purchased	1-3	60	44,000	2200/550/220	110/220	222	6,104
Picton Public Utilities	Picton	Purchased	1-3	60	2,200	220	110	44	1,117
Hydro Electric Power Com. of Ont.	Port Hope	Purchased	1-3	60		2200/550/220	110/220	40	1,485
Hydro Electric System	Port Perry	Purchased	1-3	60	44,000	110/220/550	110/220	11	315
Corporation of Sterling	Sterling	Purchased	3	60	2,400	240	120	3	92
Sherman Roy Belfry	Sunderland	Purchased	1-3	60		220	110/220	3	140
F. Anglin	Sydenham	Water	3	60	2,300	550	110	1	95
A. B. Carscallen Co., Ltd	Tamworth	Water			120		120		82
Hydro Electric Power Com. of Ont. (Serving)	Toronto							*35*	*2,738*
	Belleville R.P.D		1-3	60		220	110	1	337
	Bowanville R.P.D		1-3	60		220	110		6
	Brockville.. R.P.D			60			110/220		56
	Campbellford R.P.D		1-3	60		220	110	2	33
	Cannington No. 1 R.P.D		1-3	60		220	110/220	2	20
	Cannington No. 2 R.P.D		1-3	60		220	110/220	17	20
	Cobourg R.P.D		1-3	60		220	110		233
	Colborne R.P.D		1-3	60		220	110		70
	Kingston R.P.D			60			110/220		88
	Lakefield.... R.P.D		1-3	60		220	110		1
	Mariposa R.P.D		1-3	60		220	110/220	1	171
	Napanee R.P.D		1-3	60		220	110		7
	Newcastle R.P.D		1-3	60		220	110		26

	Norwood R.P.D.		1-3	60		220	110		1
	Oshawa R.P.D.		1-3	60		220	110	4	622
Hydro Electric Power Com. of Ont. (Serving)	Toronto							*35*	*2,738*
	Peterborough R.P.D.		1-3	60		220	110	4	736
	Pickering R.P.D.		1-3	60		220	110	2	125
	Port Hope R.P.D.		1-3	60		220	110	1	35
	Port Perry R.P.D.		1	60		220	110/220		48
	Trenton R.P.D.		1-3	60		220	110		28
	Warkworth R.P.D.		1-3	60		220	110		1
	Wellington R.P.D.		1-3	60	44,000	220	110/220	1	7
	Uxbridge R.P.D.		1	60		220	110/220		67
Hydro Electric Power Com. of Ontario	Trenton	Water	1-3	60	6,600	2300/550/220	110/220	60	1,500
Hydro Electric Power Com. of Ontario	Tweed	Purchased	1-3	60	4,160	110/220/550	110/220	12	346
Uxbridge Utilities Commission	Uxbridge	Purchased	1-3	60	2,200	220	110	12	379
Victoria Rd. Electric Association	Victoria Road	Purchased	1-3	60	2,300	220	110		21
Warkworth Hydro Electric System	Warkworth	Purchased	1	60			115		140
Public Utilities Commission	Wellington	Purchased	1-3	60	2,400	110/220	110/220	6	320
Public Utility Commission	Whitby	Purchased	1-3	60	44,000	220/550	110/220	14	947
Sherman Roy Belfry	Woodville	Purchased	1-3	60		220	110/220	3	118
Total number of meters in district of Belleville								*1,115*	*45,678*
Toronto—									
Geo. Paterson	Agincourt	Purchased	1-3	25	2,300–4,000	550	110/220	2	150
Public Utility Commission	Alliston	Purchased	1-3	60	22,000	220/550	110	14	429
Hydro Electric Commission	Arthur	Purchased	3	60		220	110	4	213
Town of Aurora	Aurora	Purchased	1-3	25	4,000	550	110/220	14	721
Duncan C. Carruthers	Avening	Water			110	110	110		
James Booth	Ayton	Water	1-3	60	2,300	2,300	110		60
Police Village of Ayton	Ayton	Purchased	1-3	60	2,300		110		60
Bala Electric Lt. & Power Co., Ltd	Bala	Water	1-3	60	2,300	550/220/110	110	3	277
Barrie Electric Light Department	Barrie	Purchased	1-2	60	2,200	2,200/ 220/110	220/110	35	2,100
Beeton Hydro Elec. Com	Beeton	Purchased	1-3	60	22,000	110/220/550	110/220	6	151
Bolton Hydro Elec. Pr. Com.	Bolton	Purchased	3	25		500	110	9	182
Corporation of Town of Bracebridge	Bracebridge	Water	1-2	60	2,200	220/2,200	110/220	1	675
Bradford Hydro Commission	Bradford	Purchased	3	60		550	110/220	7	235
John McMurchy Estate	Brampton				2,200	550	110	2	
Hydro Electric Commission	Brampton	Purchased	1-3	25	13,000	550	110	50	1,580

APPENDIX H—Continued

LIST of Electric Light and Power Companies Registered under the Provisions of the Electricity Inspection Act, during the Fiscal Year ended March 31, 1929

District and Company	Address	Type of Prime Mover	Phases of System	Frequency of System	Generator Voltage	Service Voltages		Number of Meters	
						Power	Lighting	Power	Lighting
Toronto—Continued									
Knight Bros. Company, Ltd	Burks Falls	Water	3	60	2,300	.....	110/220	.....	43
G. W. Collins	Chatsworth	Purchased	1-3	60	22,000	220	110	1	92
Newall Clendenan	Clarkesburg	.....	1-3	60	2,200	220	110	.....	84
Clifford Hydro Electric System	Clifford	Purchased	1	25	4,000	220	110/220	.....	121
The Municipality of Coldwater	Coldwater	Purchased	2-3	60	2,200	220	110	4	185
Public Utilities Commission	Collingwood	Purchased	1-3	60	.....	2,200	220/110	57	1,556
Cookstown Hydro Electric System	Cookstown	Purchased	1-3	60	2,200	220	110	2	179
Toronto Twp. Hydro Elec. System	Cooksville	Purchased	3	25	13,200/4,200/2,200	220/225	110	12	1,600
The Creemore Hydro Elec. System	Creemore	Purchased	1-3	60	2,200	220/110	110	2	211
Canadian National Railways	Depot Harbor	Purchased	1-3	60	550	.....	220/110	.....	51
Drayton Hydro Commission	Drayton	Purchased	1-3	25	.....	550	110	5	205
Dundalk Hydro System	Dundalk	Water	1-3	60	22,000	220	110	3	222
Hydro Electric Commission	Durham	Purchased	1-3	60	22,000	220/550	110	6	450
Canadian National Electric Railways	Eldorado Park	Purchased	1-3	25	13,000	550	110	1	1
Andrew Beardsall	Elmvale	Purchased	2	60	220	220	110	11	183
Hydro Electric Commission	Elora	Purchased	1-3	25	13,200/4,000	550	110/220	6	364
Caledon Electric Co., Ltd	Erin	Water	3	60	2,200	550	110	7	659
Fergus Public Utilities	Fergus	Purchased	3	25	2,300	550	110/220	14	633
Flesherton Hydro Electric System	Flesherton	Purchased	1-3	60	2,300	220	110	1	154
Grand Valley Hydro Elec. System	Grand Valley	Purchased	1-3	60	2,200	110/220/550	110	2	175
Gravenhurst Light & Water Com	Gravenhurst	Water	2-3	60	41,000	220/110	110	12	475
Board of Light & Heat Commissioners	Guelph	Purchased	3	25	13,200/2,300	13,200/575	2,300/115/230	127	5,444
Public Utilities Commission	Hanover	Purchased	1-3	60	4,000	110/220/550	110/220	26	772
Hydro Elec. Com. of Town of Harriston	Harriston	Purchased	1-3	25	4,400	550	110	11	390
Huntsville Public Utilities Commission	Huntsville	Purchased	1-3	60	.....	110/220/550	110	8	665
Holstein Hydro Commission	Holstein	Purchased		60	22,000	220	110	1	63
Etobicoke Twp. Hydro Elec. Com	Islington	Water	3	25	4,000	550	110/220	20	4,000
Canada Wire & Cable	Leaside	Purchased	3	25	13,200	550	220/110	1	94
Markdale Hydro System	Markdale	Purchased	1-3	60	.....	110/220	110	9	247
Markham Hydro Electric System	Markham	Purchased	1-3	25	2,200	220/550	110	10	310
Public Utilities Commission	Meaford	Purchased	3	60	.....	230	115	13	725
Midland Public Utilities Com	Midland	Purchased	1-3	60	22,000	2,200/220/110	220/110	61	1,785
Public Utilities Com. of Mimico	Mimico	Purchased	1-3	25	4,000	550	115/130	16	1,644
Hydro Electric Power Com	Moorefield	Purchased	1-3	25	.....	550	110	2	77

Mt. Forest Water & Light Com.	Mt. Forest	Purchased		1-3	60		220	110/220	10	486
Corporation of Town of Newmarket	Newmarket	Purchased		3	25		550	110/220	11	1,058
The New Toronto Public Utilities Com.	New Toronto	Purchased		1-3	25		550	110/220	25	1,500
The Hydro Electric Commission	Neustadt	Water		1-3	60	4,000	220	110/220	2	118
Canadian Explosives Limited	Nobel	Steam		1-3	60	600	550	110/120	2	42
Orangeville Hydro Commission	Orangeville	Purchased		1-2-3	60	22,000	550/220	110/220	13	735
Orillia Water Light & Power Com.	Orillia	Water		1-3	60	2,200	220/440/ 550/2,200	110	28	1,482
Public Utilities Commission	Owen Sound	Purchased		3	60	4,000	550/2,200	110/220	113	3,430
Palmerston Rural Power Dist.	Palmerston	Purchased		1-3	25	4,000	220/550	110/220	.....	10
The Parry Sound Public Utilities Com.	Parry Sound	Water		1-3	60	2,300	2,300	100/220	15	816
Penetanguishene Water & Light Com.	Penetanguishene	Water		1-3	60	2,200	220/ 550/2,200	110/220	27	642
Corporation of Port Credit	Port Credit	Purchased		3	25	13,000	4,400	110/220	5	500
Port McNicol Elec. Power Com.	Port McNicol	Purchased		3	60	2,200	220	110	1	224
Frank A. Aussem	Priceville	Purchased		1	60	.....	.....	110	.....	35
Rockwood Hydro Electric	Rockwood	Purchased		1-3	25	13,000	550	110/220	.....	166
Rosseau Electric System	Rosseau	Gasolene	D.C.	.....	.....	120	.....	110	.....	21
Corp'n of Village of Richmond Hill	Richmond Hill	Purchased		1-3	25	2,200	550	220/110	13	360
Shelburne Hydro Electric Com.	Shelburne	Purchased		1-3	60	22,000	550/220	110	13	380
South River Electric Company	South River	Water		1-3	60	4,400	550	220/110	.....	2
Stayner Hydro Commission	Stayner	Purchased		1-3	60	4,000	220	220/110	9	284
Corporation of Village of Stouffville	Stouffville	Purchased		1-2-3	25	4,000	550	110	5	345
Village of Streetsville	Streetsville	.....		3	60	2,200	110/220	110	2	190
Sutton Hydro Electric Power System	Sutton	Purchased		3	25	2,200/4,000	.....	.....	3	401
Alfred J. Lowe	Thornbury	Water		1-3	60	2,200	220	110	.....	222
Police Village of Thornton	Thornton	Purchased		1-3	60	26,400	4,000	110	.....	58
Childs Company	Toronto	Purchased	D.C.	.....	.....	115/230	.....	115/230	.....	71
Canada Veiling Company	Toronto	Purchased		3	25	.....	250	250	1	6
Canadian National Exhibition Assoc.	Toronto	Purchased		1-3	25	.....	550/220	110	7	40
Monarch Supply Co., Ltd.	Toronto	Steam	D.C.	.....	.....	220	110/220	110/220	10	34
Toronto Electric Commissioners	Toronto	Purchased	D.C. &...	1-3	{32½ 25	13,200	2,300/550 115/230	115/230	5,172	162,927
Hydro Elec. Com. of Twp. of East York	Toronto	Purchased		1-3	25	4,000	600	110/220	26	7,400
Holstein Rural Power District	Toronto	Purchased		1	60	.....	.....	110/220	.....	.....
Hydro Electric Power Com. Systems	Toronto	.....		.....	.....	.....	.....	.....	564	200
	Niagara	Water		3	25	12,000	220,000/ 110,000/ 60,000/ 46,000/ 30,000/ 26,400/ 13,200/ 12,000/4,000/ 2,300/550	.....	405	154
	Central Ontario	Water		3	60	6,600/2,300	44,000/11,000 4,160/2,400	.....	63	16
	Georgian Bay	Water		3	60	2,300/4,000/ 6,600	38,000/ 22,000 4,000/2,300/	.....	90	30
	Nipissing	Water		3	60	2,300	22,000/2,300	.....	6	.....

APPENDIX H—Continued

LIST of Electric Light and Power Companies Registered under the Provisions of the Electricity Inspection Act, during the Fiscal Year ended March 31, 1929

District and Company	Address	Type of Prime Mover	Phases of System	Frequency of System	Generator Voltage	Service Voltages		Number of Meters	
						Power	Lighting	Power	Lighting
Toronto—Concluded									
Scarboro Hydro Electric System	Toronto	Purchased	1-3	25		550	110/220	31	4,069
Hydro Electric Power Com. of Ontario	Toronto							46	4,803
(Serving)	Barrie R.P.D.		1	60		220	110/220		93
	Beaumaris R.P.D.		1	60		220	110/220		106
	Beeton R.P.D.		1	60			110/220		1
	Brampton R.P.D.		1	25			110/220		123
	Bond Lake R.P.D.		1-3	25	4,000/2,300	550/220	220/110	15	840
	Buckskin R.P.D.		1	60		220	110/220	1	12
	Chatsworth R.P.D.		1	60			110/220		18
	Elmvale R.P.D.		1	60		220	110/220	1	21
	Elora R.P.D.		1-3	25	4,000	220/550	110/220	1	125
	Flesherton R.P.D.		1-3	60		220	110/220	1	33
	Georgina R.P.D.		1	60		220	110/220		76
	Gravenhurst R.P.D.		1	60		220	110/220		7
	Guelph R.P.D.		1-3	25		220	110/220	1	181
	Hornings Mills R.P.D.		1-3	60		220	110/220		30
	Innisfil R.P.D.		1	60		220	110/220	2	151
	Keswick R.P.D.		1-3	25	4,000/2,300	550/220	220/110	1	610
	Markdale R.P.D.		1	60			110/220		2
	Markham R.P.D.		1-3	60	4,000/2,300	550/220	220/110	6	415
	Meaford R.P.D.		1	60					
	Neustadt R.P.D.		1	60		220	110/220		1

	Newmarket R.P.D.		1-3	25	4,000/2,300	550/220	220/110	5	83
	Nottawasaga R.P.D.		1-3	60		220	110/220		84
	Orangeville R.P.D.		1	60			110/220		17
	Scarboro R.P.D.		1-3	60	4,000/2,300	550/220	220/110	6	275
	Shelburne R.P.D.		1	60			110/220		11
	Sparrow Lake R.P.D.		1	60		220	110/220		113
	Stayner R.P.D.		1	60			110/220		350
	Streetsville R.P.D.		1-3	25		220	110/220		260
	Tara R.P.D.		1-3	60		220	110/220		87
	Woodbridge R.P.D.		1-3	25		220	110/220	6	678
Corporation of Village of Tottenham	Tottenham			60	26,400	110/220	110/220	6	160
The Light and Power Committee	Victoria Harbour	Water	1	60	22,000		110		180
Waubaushene Hydro Electric Com	Waubaushene	Water		60	2,200	220	110	6	145
Weston Water, Power & Light Com	Weston	Purchased	1-3	25		550	220/110	29	1,600
North York Hydro Elec. Power Com	Willowdale	Purchased	1-3	25	4,000/2,300	550	220/110	23	1,811
Woodbridge Hydro Electric Com	Woodbridge	Purchased	3	25	13,200/4,000	550	110/220	6	259
Total number of meters in District of Toronto								6,822	227,944
Hamilton—									
Acton Public Utilities Commission	Acton	Purchased	1-3	25	4,000	550/220	110/220	19	535
Hydro Electric System Twp. of Ancaster	Ancaster	Purchased					110/220	4	616
Ayr Hydro Commission	Ayr	Purchased	1-3	25	2,300	550/220	220/110	2	244
The Police Village of Baden	Baden	Purchased	1-3	25	13,000	4,400/550	110	4	145
Barton Hydro Electric Commission	Barton	Purchased	1-3	25	2,200	220	110/220	2	79
Hamilton Cataract Pr., Lt & Traction Co., Ltd	Beamsville	Water	1-3	66⅔	2,400	220	110	6	468
Brantford Hydro Electric System	Brantford	Purchased	1-3	25	26,600	4,000/550/220	220/110	105	6,771
Twp. of Brantford Hydro Electric System	Brantford	Purchased	1-3	25	2,200	550	110/220	3	698
Western Counties Electric Co., Ltd	Brantford	Water	1-3	66⅔	2,400	220	110	123	1,540
Bridgeport Hydro Electric Com	Bridgeport	Purchased	1-3	25	4,000	220/550	220/110	3	104
Bronte Light & Power Com	Bronte	Purchased	3	66⅔	2,200	220	110	2	312
Burford Hydro Electric System	Burford	Purchased	3	25	2,200	550/220	110	4	216
Hamilton Cataract Pr, Lt. & Traction Co., Ltd	Burlington	Water	1, 2 and 3	66⅔	2,400	220	110	23	2,151
Caledonia Hydro Electric System	Caledonia	Purchased	3	25	2,200	550/220	110	10	303
Campbellville Hydro Electric Com	Campbellville	Purchased	1	25	4,000		110/220		45
Cayuga Hydro Electric System	Cayuga	Purchased	1-3	25	4,000	550	110/220	3	125
Chippawa Hydro Electric Com	Chippawa	Purchased	1-3	25	12,000	2,200	220/110	1	313
The Delhi Light & Power Co., Ltd	Delhi	Water	1-3	60	2,300	220/2,200	110	17	201
Dundas Public Utilities Com	Dundas	Purchased	1-3	25	13,200	550	110	45	1,280

APPENDIX H—Continued

LIST of Electric Light and Power Companies Registered under the Provisions of the Electricity Inspection Act, during the Fiscal Year ended March 31, 1929

District and Company	Address	Type of Prime Mover	Phases of System	Frequency of System	Generator Voltage	Service Voltages		Number of Meters	
						Power	Lighting	Power	Lighting
Hamilton—Continued									
The Dundas Electric Company Ltd	Dundas	Water	1-3	66⅔	2,400	220	110	4	75
Dunnville Public Utilities Commission	Dunnville	Purchased	1-3	25	46,000/2,300	550/110/220	110	22	686
Elmira Public Utilities Commission	Elmira	Purchased	1-3	25	13,200/4,000	550	220/110	30	690
Fonthill Hydro Electric Commission	Fonthill	Purchased	2-3	25	4,000	220	110	4	223
The Public Utilities Commission of Galt	Galt	Purchased	1-3	25	13,200	550	110	120	3,823
Hydro Electric System	Georgetown	Purchased		25	4,000	220/550	110/220	28	730
Hamilton Cataract Pr., Lt. & Traction Co., Ltd	Grimbsy	Water	1-3	66⅔	2,400	220	110	30	862
Hagersville Hydro System	Hagersville	Purchased	1-3	25		4,000	110	13	365
Hamilton Cataract Pr., Lt. & Traction Co., Ltd	Hamilton	Water	1, 2 and 3	66⅔	2,400	220	110	471	60
Hamilton Electric Light & Power Co., Ltd.	Hamilton	Water	1-3	66⅔	2,400		110		5,442
Hamilton Hydro Electric System	Hamilton	Purchased	1-3	25	13,200	13,200/2,200/550/220	110/220	1,050	32,400
Hespeler Hydro Electric Commission	Hespeler	Purchased	1-3	25	13,200	110/220/550	110	18	861
Humberstone Hydro System	Humberstone	Purchased	3	25	12,000	4,000/220	110/220	9	471
Jarvis Hydro Electric System	Jarvis	Purchased	1-3	25	4,000	550	110/220	4	115
The Public Utilities Commission	Kitchener	Purchased	1-3	25	13,200	2,200/550	110/220	227	7,029
Lyden Hydro Electric System	Lyden	Purchased		25	13,600	220	110	1	93
Merritton Hydro Electric Com	Merritton	Purchased	1-3	25	12,000	2200/550/220	220/110	4	700
Milton Hydro Commission	Milton	Purchased	3	25	13,200	2,200/550	110/220	21	542
New Hamburg Hydro System	New Hamburg	Purchased	1-3	25		220/550	110/220	11	426
Canadian Niagara Power Company	Niagara Falls	Water	1-3	25	11,000	220/2,200/4,400/11,000/40,000	110	63	3,731
Hydro Electric Com. of Niagara Falls	Niagara Falls	Purchased	3	25	12,000	2,200/220	110/220	88	4,952
Stamford Hydro Electric Com	Niagara Falls	Purchased	1-3	25	12,000	220/440/550	110/220	13	1,293
Niagara Hydro Electric Com	Niagara-on-the Lake	Purchased	1-3	25	2,200	220/2,200	110	18	487
Oakville Water & Light Com	Oakville	Purchased	1-3	60		2,200	110/220	30	1,020
Trafalgar Public Utilities	Oakville	Steam and Water	1-3	60	40,000	550	110/220	12	229
The Paris Hydro Elec. & Water Com	Paris	Purchased	3	25	2,200	550	110/220	20	1,252
Port Colborne Hydro Electric Com	Port Colborne	Purchased	1-3	25		220/550	110/220	18	1,342
Port Dalhousie Public Utilities Com	Port Dalhousie	Purchased	1-3	25	12,000	220/550	110/220	11	599
Port Dover Hydro Electric System	Port Dover	Purchased	1-3	25	26,000	220/550	110/220	13	437
Port Rowan Hydro System	Port Rowan	Purchased							101
Preston Light & Water Commission	Preston	Purchased	3	25	13,200	550	110/220	48	1,703

Queenston Hydro Electric System	Queenston	Purchased	1-3	25	4,000	110/220	110/220	1	65
Simcoe Hydro Electric System	Simcoe	Purchased	1-3	25		550/220	110/220	32	1,028
Municipal Power & Light Com	Smithville	Purchased	3	60	2,200	220/550	110/220	7	200
The Lincoln Electric Lt. & Pr. Co., Ltd	St. Catharines	Water	1-3	66⅔	2,400	220	110	107	1,377
Public Utilities Com. of St. Catharines	St. Catharines	Purchased	1-3	25		2200/550/220	112	134	6,129
St. George Hydro Elec. System	St. George	Purchased	1-3	25	2,200	550	110/220	4	163
St. Jacob's Hydro Elec. System	St. Jacob's	Purchased	1-3	25	4,000	550	110/220	6	123
Public Utilities Commission	Thorold	Water	1-3	25	2,200	220/550	110/220	11	1,390
Hydro Electric Power Com. of Ontario	Toronto							105	8,112
	Acton R.P.D		1	25		220	110/220		5
	Ayr R.P.D		1-3	25	2,300/4,160	110/220	110/220		34
	Baden R.P.D		1-3	25	4,000	220/550	220/110	3	247
	Beamsville R.P.D		1-3	25	12,000	4,400/2,200	110/220	14	619
	Brant D.P.D		1-3	25					
	Burford R.P.D		1-3	25	2,300/4,160	110/220	110/220	2	115
	Caledonia R.P.D		1-3	25	2,200	220	110/220	1	119
	Chippawa R.P.D		1-3	25	12,000	220	110	3	108
	Dundas R.P.D		1-3	25	12,000	550/220	110/220	8	458
	Elmira R.P.D		1-3	25	4,000	220/550	220/110		31
	Galt R.P.D		1-3	25	4,000	220/550	220/110		203
	Georgetown R.P.D		1	25		220	110/220		130
	Grantham R.P.D		1	25		110/220	110	3	462
	Haldimand R.P.D		1	25			110/220		75
	Jordon R.P.D		1	25		110/220	110		209
	Lynden R.P.D		1-3	25	12,000	220	110/220	1	160
	Milton R.P.D		1-3	25		220	110/220	1	193
	Niagara D.P.D		1-3	25	12,000	220	110	6	212
	Preston R.P.D		1-3	25	4,000	220/550	220/110	3	640
	Saltfleet R.P.D		1-3	25	4,000	220	110/220	3	828
	Simcoe R.P.D		1	25			110/220	2	164
	Stamford R.P.D		1-3	25	12,000	220	110	1	265
	St. Jacob's R.P.D		1-3	25	4,000	220/550	220/110	4	208
	Walsingham R.P.D		1	25			110/220		74
	Waterdown R.P.D		1-3	25	12,000	220/550	110/220	9	215
	Waterford R.P.D		1	25			110/220	1	70
	Welland R.P.D		1, 2 and 3	25		220/550	110/220	19	1,668
	Waterford R.P.D		3	25	4,000	220/550	110/220	13	358
	Watertown R.P.D		3	25		110/220/550	110/220	8	242

APPENDIX H—Continued

LIST of Electric Light and Power Companies Registered under the Provisions of the Electricity Inspection Act, during the Fiscal Year ended March 31, 1929

District and Company	Address	Type of Prime Mover	Phases of System	Frequency of System	Generator Voltage	Service Voltages		Number of Meters	
						Power	Lighting	Power	Lighting
Hamilton—Concluded									
Public Utilities Commission	Waterloo	Purchased	1-3	25		2,200/550	110/220	68	1,867
Hamilton Cataract Power, Lt. & Tr. Co., Ltd.	Welland	Water	1-3	66⅔	2,400	575/220	110/220	8	
Welland Hydro Electric System	Welland	Purchased	1-3	25	46,000	110/220/ 550/2,200	110/220	78	2,523
Wellesley Light & Power Com	Wellesley	Purchased	1-3	25		550	110/220	4	136
Total number of meters in district of Hamilton								3,342	111,978
London—									
Alvinston Hydro Electric System	Alvinston	Purchased	3	25	4,400	550	110	3	206
Hydro Electric Commission	Ailsa Craig	Purchased	1-3	25	4,000	550	110	3	160
Amherstburg Hydro Electric System	Amherstburg	Purchased	1-2-3	25		550/220/110	110	20	750
The Arkona Hydro Electric System	Arkona	Water	1-3	25	4.000	220/550	110/220	3	122
Aylmer Public Utilities	Aylmer	Purchased	1-3	25		550	110/220	14	644
Beachville H. E. System	Beachville	Purchased	1-3	25	4,400	2,200/220	110	4	130
Belle River Hydro Electric System	Belle River	Purchased	1-3	25		550	110/220	4	204
Blenheim Public Utilities Com	Blenheim	Purchased	1-3	25	26,000	2200/550/220	110/220	11	573
Blyth Public Utilities Commission	Blyth	Purchased	1-3	25	4,000	550/220	110/220	4	186
Bothwell Hydro Electric Commission	Bothwell	Purchased	1-3	25		26,000/550	110	5	200
Brigden Hydro Electric System	Brigden	Purchased	1-3	25		550	110	6	140
Brussels Hydro Electric System	Brussels	Purchased	2-3	25		550	110/220	1	235
Burgessville Hydro Flectric System	Burgessville	Purchased	1-3	25		550	110/220	2	73
Cargill Limited	Cargill	Water	D.C.		120	240	110		
The Chatham Public Utilities Com	Chatham	Purchased	1-3	25	2,300	550/220	110	116	4,400
Chesley Public Utilities Commission	Chesley	Water	1-3	60	22,000	550/220	110/550	18	490
Clinton Public Utilities Commission	Clinton	Purchased	1-3	25	27,600	550	110	14	624
Comber Hydro Electric System	Comber	Purchased	1-3	25		550	110	2	141
Cottam Hydro Electric System	Cottam	Purchased	1-3	25	2.300	220	110	2	119
Courtright Hydro Electric System	Courtright	Purchased	1-3	25	4,000/2,000	220/110	110/220	1	90
Dashwood Hydro Electric System	Dashwood	Purchased	1-3	25		550	110	1	98
Delaware Hydro System	Delaware	Purchased	1	25		220	110/220		65
Dorchester Hydro System	Dorchester	Purchased	1-3	25	4,000	550	110/220	1	153
Dresden Hydro Electric System	Dresden	Purchased	1-3	25		220/550	115	14	462
Drumbo Hydro Electric System	Drumbo	Purchased	3	25	2.200	550/220	110/220	2	93
Dublin Public Utilities Commission	Dublin	Purchased	1-3	25		550	110	4	61

Dutton Hydro System	Dutton	Purchased	1-3	25	2,200	550	110/220	5	260
Elmwood Hydro Electric System	Elmwood	Purchased	1-3	60		220	110	1	68
Embro Hydro Electric Commission	Embro	Purchased	1-3	25	13,000	2,200	110	2	141
Erieau Hydro Electric System	Erieau	Purchased	1	25	4,000	220	110/220	1	122
The Essex Hydro Electric System	Essex	Purchased	1-3	25		550/220	110	18	530
Public Utilities Commission	Exeter	Purchased	1-3	25	4,400	550/220	110/220	11	542
Police Trustees	Fordwich	Purchased	1	60	2,200		110		43
Forest Public Utilities Commission	Forest	Purchased	1-3	25	26,400	550	220/110	21	560
Formosa Electric Light Co., Ltd	Formosa	Purchased	2-3	60	23,000	220	110	1	50
Glencoe Hydro Electric Com	Glencoe	Purchased	1-3	25	1,200	550/220	110/220	5	291
The Water & Light Commission	Goderich	Purchased	1-3	25	110,000	550	110/220	19	1,303
Granton Hydro System	Granton	Purchased	1-3	25		550	110	1	107
Harrow Hydro Electric Com	Harrow	Purchased	1-3	25	4,000	220	110/220	4	254
Hensall Hydro Flectric System	Hensall	Purchased	1-3	25		550	110	12	217
Highgate Hydro Electric System	Highgate	Purchased	1	25		110/220	110/220	6	126
The Ingersoll Public Utilities Com	Ingersoll	Purchased	1-3	25	13,200/2,200	2200/550/220	110/220	46	1,561
The Electric Light & Water Com	Kincardine	Purchased	1-3	60	22,000	220/550	110/220	22	628
Kingsville Hydro Electric	Kingsville	Purchased	1-3	25	2,300	220	110	19	836
Lambeth Hydro System	Lambeth	Purchased	1-3	25	2,200	550	110/220	1	120
Lasalle Hydro Electric System	Lasalle	Purchased	1-3	25		220	110	2	187
Hydro Elec. Com. of Town of Leamington	Leamington	Purchased	1-3	25	2,200	220	110	23	4,432
Listowel Public Utilities Com	Listowel	Purchased	1-3	25		550	110/220	22	814
Public Utilities Commission	London	Purchased	1-3	25	13,200	550	110/220	530	19,174
Cities Heating Company Ltd	London	Purchased	D.C.		125 and 500	500	110	1	8
Lucan Hydro Elec. Com	Lucan	Purchased	1-3	25		550	110	9	208
Lucknow Hydro Elec. System	Lucknow	Purchased	1-3	60		550	110/220	5	320
Merlin Hydro Electric System	Merlin	Purchased	1-3	25		550	110	6	142
Mildmay Electric Light Co., Ltd	Mildmay	Purchased	3	60	2,200	2,200	110/220	1	160
Milverton Hydro Elec. Pr. Com	Milverton	Purchased	1-3	25	4,000	550	110/220	8	252
The Public Utilities Commission	Mitchell	Purchased	1-3	25		550	110	25	545
Mt. Brydges Hydro Electric System	Mt. Brydges	Purchased	1-3	25		500	110/220	1	154
Newbury Hydro System	Newbury	Purchased	2-3	25		110/220	110/220	1	80
Norwich Public Utilities Com	Norwich	Purchased	1-3	25		550/220	110/220	9	423
Oil Springs Hydro Elec. Com	Oil Springs	Purchased	1-3	25	4,000	220/550	110/220	37	99
Otterville Hydro Electric	Otterville	Purchased	1	25	4,000	500	110	4	135
Palmerston Public Utilities Com	Palmerston	Purchased	1-3	25	4,000	550	220/110	8	478
Paisley Hydro Electric Com	Paisley	Purchased	1-3	60		220	110/220	4	200
Parkhill Hydro Electric System	Parkhill	Purchased	1-3	25		550	110/220	4	290
Plattsville Hydro System	Plattsville	Purchased	1-3	25		550	110/220	1	105
Petrolia Hydro Electric System	Petrolia	Purchased	1-3	25	26,000	220/550	110/220	67	808
Port Stanley Hydro Elec. Department	Port Stanley	Purchased	1-3	25	2,200	220	110/220	10	483
Princeton Hydro Elec. Pr. Com	Princeton	Purchased	1-3	25		500	100/200	2	97
Public Utilities Commission	Ridgetown	Purchased	1-3	25		550	110/220	21	661
Ripley Hydro Electric System	Ripley	Purchased	1-3	60	4,400	550	110/220		138
Rodney Hydro System	Rodney	Purchased	1-3	25	2,200	550	110/220	4	255
Sandwich Hydro Electric System	Sandwich	Purchased	1-3	25	26,400	220/550	110/220	27	2,905
Sarnia Hydro Electric System	Sarnia	Purchased	1-3	25		2,200/550/ 440/220	115	83	5,199
Point Edward Hydro Electric System	Sarnia	Purchased	1-3	25		2,200/550/ 440/220	115	11	333

APPENDIX H—Continued

LIST of Electric Light and Power Companies Registered under the Provisions of the Electricity Inspection Act, during the Fiscal Year ended March 31, 1929

District and Company	Address	Type of Prime Mover	Phases of System	Frequency of System	Generator Voltage	Service Voltages		Number of Meters	
						Power	Lighting	Power	Lighting
London—Continued									
Public Utility Commission	Seaforth	Purchased	1-3	25	2,200	220/550/2200	110	15	620
The Hydro Commission	Springfield	Purchased	1-3	25	33,000	550	110	4	116
Public Utility Commission	Stratford	Purchased	1-3	25	4,000	550	220/110	148	4,760
Strathroy Public Utilities Com	Strathroy	Purchased	1-3	25	4,000	550	110/220	25	928
Public Utilities Commission	St. Mary's	Purchased	1-3	25	2,300	550/220	220/110	36	1,183
Hydro Elec. Com. of St. Thomas	St. Thomas	Purchased	1-3	25		550	220/110	104	4,684
Tara Hydro System	Tara	Purchased	1-3	60	22,000	220	110	4	144
Tavistock Public Utility Com	Tavistock	Purchased	1-3	60	26,400	550	110/220	6	305
Teeswater Hydro System	Teeswater	Purchased	1	60	2,200	220	110/220	8	275
Thamesford Hydro Elec. System	Thamesford	Purchased	1-3	25	2,200/4,400	110/220/550	110	8	143
Public Utilities Commission	Thamesville	Purchased	1-3	25		550	110/220	7	300
Thedford Hydro Elec. Com	Thedford	Purchased	1-3	25	4,400	550	220/110	2	163
Thorndale Hydro Electric	Thorndale	Purchased	3	25	4,000	220/550	110/220	1	92
Tilbury Hydro Power Com	Tilbury	Purchased	1-3	25	26,000	550/220	110	15	485
Public Utilities Commission	Tillsonburg	Purchased	1-3	25	13,200	2200/550/220	220/110	26	1,014
Hydro Electric Power Com. of Ontario (Serving)	Toronto							178	14,215
	Amherstburg R.P.D.		1	25		220	220	1	412
	Aylmer R.P.D.		1-2-3	25	4,000/8,000	220	110/220	3	395
	Belle River R.P.D.		1-3	25		550	110/220	2	251
	Blenheim R.P.D.		1-2-3	25	4,000/2,300	110/220	110	4	224
	Bothwell R.P.D.		1-3	25	2,200/4,000	220/550	110/220	8	70
	Brigden R.P.D.		1-3	25	2,200/4,000	220	110/220		63
	Chatham R.P.D.		1-3	25		220	110/220	3	555
	Clinton R.P.D.		1-3	25	8,000	220/550	110/220	3	123
	Delaware R.P.D.		1-3	25		220	110	3	476
	Dorchester R.P.D.		1-3	25		220	110	1	477
	Dresden R.P.D.		1	25	2,200		110/220		13
	Drumbo R.P.D.		1-3	25	4,160/2,300	110/220	110		140
	Dutton R.P.D.		1	25	4,000		110/220		66

Essex R.P.D.		1-3	25		550	110/220	1	270
Exeter R.P.D.		1-3	25		220	110	2	421
Forest R.P.D.		1	25	220	110/220	110/220		15
Goderich R.P.D.		1-3	25	2,200	220	220/110	1	45
Harrow R.P.D.		1-3	25		220	220/110		324
Ingersoll R.P.D.		1-2-3	25	2,200/4,000	550	110/220	5	244
Kingsville R.P.D.		1-3	25		220	110/220	5	936
Listowel R.P.D.		1-3	25	4,000	220/550	220/110	4	149
London R.P.D.		1-3	25		220	110	6	1,496
London Twp. Voted Area		1-3	25		220	110	2	294
Lucan R.P.D.		1	25			110		93
Lucknow R.P.D.		1-3	60		220	110/220	1	2
Merlin R.P.D.		1-3	25		220	110/220	1	110
Mitchell R.P.D.		1-3	25	4,000	220/550	110/220	3	171
Milverton R.P.D.		1-3	25	4,000	220/550	220/110	8	68
Norwich R.P.D.		1-2-3	25	4,000	220/550	110/220	31	337
Oil Springs R.P.D.		1	25	2,200	220	110/220	1	79
Palmerston R.P.D.		1-3	25	4,000	220/550	110/220		10
Petrolia R.P.D.		1-3	25	2,200/4,000	220	110/220	1	16
Ridgetown R.P.D.		1-3	25	2,000		110/220		497
Ripley R.P.D.		1-3	60		220	110/220	1	2
Sandwich R.P.B.		3	25		4,000	220/110	4	1,644
Sarnia R.P.D.		1-3	25	2,200/4,000	220	110/220	1	842
Seaforth R.P.D.		1-3	25	2,200	220	220/110	1	107
Stratford R.P.D.		1-3	25	4,000	220/550	110/220	3	195
Strathroy R.P.D.		1	25			110		65
St. Mary's R.P.D.		1-3	25	4,000/8,000	220/550	220/110	3	199
St. Thomas R.P.D.		1-2-3	25	4,000	220/550	110/220	5	807
Tavistock R.P.D.		1-3	25	4,000	220/550	110/220	1	175
Thamesville R.P.D.		1-3	25	2,200/4,400	220	110/220	1	125
Tilbury R.P.D.		1-3	25		550	110/220	2	71
Tilsonburg R.P.D.		1-2-3	25	4,000	220	110/220	35	441

APPENDIX H—Continued

LIST of Electric Light and Power Companies Registered under the Provisions of the Electricity Inspection Act, during the Fiscal Year ended March 31, 1929

District and Company	Address	Type of Prime Mover	Phases of System	Frequency of System	Generator Voltage	Service Voltages		Number of Meters	
						Power	Lighting	Power	Lighting
London—Concluded									
Hydro Electric Power Com. of Ontario—(Serving)—*Concluded*	Toronto—								
	Wallaceburg R.P.D.		1-3	25		220/550	110/220	5	354
	Walton R.P.D.		1-3	25	4,000	220/550	220/110	8	149
	Walkerton Quarry R.P.D.		1	60		220	110/220		5
	Woodstock R.P.D.		1-2-3	25	4,000	220/550	110/220	8	503
	Wroxeter R.P.D.		1	60		220	110/220		68
Wallaceburg Hydro Electric System	Wallaceburg	Purchased	3	25	26,400	550	220/110	28	1,123
Walkerton Electric, Lt. & Pr. Company	Walkerton	Water	1-3	60	2,300	220	110	17	600
Saugeen Electric, Lt. & Pr. Co., Ltd	Walkerton	Water and steam	1-3	60	6,600/1,100	220	110	27	1,061
Walkerville Hydro Electric System	Walkerville	Purchased	1-3	25		220/550	110	144	7,604
Wardsville Hydro Electric System	Wardsville	Purchased	1	25		220	110/220		74
Public Utilities Commission	Watford	Purchased	1-3	25		220/550	110/220	6	345
Wheatley Hydro Electric System	Wheatley	Purchased	1-3	25	2,200	550	110/220	2	231
West Lorne Hydro System	West Lorne	Purchased	1-3	25	2,200	220/110	110	3	245
Wingham Utilities Commission	Wingham	Purchased	1-3	60		550	110	23	713
Windsor Hydro Electric System	Windsor	Purchased	1-3	25	26,400	550/220	110/220	350	17,006
Woodstock Public Utilities Com.	Woodstock	Purchased	1-3	25		2200/550/220	110/220	93	3,123
Wyoming Hydro Electric System	Wyoming	Purchased	3	25		220/550	110/220	1	160
Zurich Hydro Electric System	Zurich	Purchased	1-3	25		550	110	2	167
Total numbers of meters in district of London								*2,659*	*119,142*
Sudbury—									
Municipal Service Corporation Ltd	Amos	Oil and Steam	3	60	2,200	550/220	110		225
Municipal Corp. of Twp. Calvert	Ansonville	Purchased	3	60		2,200	110	2	550
Fred Deagle	Blind River	Water	3	60	2,400	550	110	2	380
Cache Bay Electric Light Company	Cache Bay	Water	1	60	2,200	2,200	110		115
Hydro Electric Power Com. of Ontario	Callander	Water	1-3	60	2,200	220	110/220	2	159
Elec. Lt. Dept. of Mun. of Town of Capreol	Capreol	Purchased	1	60	2,200		220/110		379

Chapleau Electric Light & Power Co.	Chapleau	Water and Steam	1-3	60	2,300	2300/550/220	110	7	459
Northern Ontario Power Co., Ltd	Cobalt	Water	1-3	60	2,400 and 11,000	110/220	110	51	1,576
Public Utilities Commission	Cochrane	Purchased	1-3	60	110,000	220	110	94	730
The Lorne Power Company, Limited	Coniston	Water	3	60	200	44,000	.....	.....	.....
The Huronian Company Limited	Copper Cliff	Water	1-3	25 and 60	2,200-6,600	33,000/2,200/550	110	11	579
Northern Ontario Power Company Ltd.	Englehart	Water	1-3	60	2,400-11,000	110/220	110/220	5	298
Abitibi Power & Paper Company	Espanola	Water	1-3	60	2,300	2,300/550	220/110	2	392
Public Utilities Commission	Gore Bay	Oil	3	60	2,300	220	110	.....	68
Northern Ontario Power Company	Haileybury	Water	1-3	60	2,400-11,000	110/220	110/220	21	665
Canadian National Railways	Hornepayne	Oil	3	60	550	550	550-220/110	.....	60
Abitibi Power & Paper Co., Limited	Iroquois Falls	Water	3	60	13,200	660/550	110/220	6	301
Corporation of Town of Kapuskasing	Kapuskasing	Purchased	1-3	60	2,200	220	110	76	640
Gatineau Power Company	Kipawa	Water	3	60	6,600	.....	.....	3	.....
Northern Ontario Power Company	Kirkland Lake	Water	1-3	60	2,400-2,300 and 11,000	110/220	110/220	55	1,176
La Cie Electrique de Lasarre	Lasarre	.....	1-3	60	2,200	550	110/220	7	225
Public Utilities Commission	Little Current	Steam	1-3	60	2,300	110	110	.....	187
Lloyd Deagle & Co	Massey	Water	1	60	.....	.....	110/220	.....	83
The Mattawa Electric Lt. & Pr. Co., Ltd.	Mattawa	Water	1-3	60	2,200	220/110	110	.....	7
Northern Academy (Dept. of Education)	Monteith	Water	2	60	2,200	220	110	2	33
Canadian National Railway Co	Nakina	Steam	1-3	60	550	550	550/220/110	.....	8
Northern Ontario Power Company, Ltd.	New Liskeard	Water	1-3	60	2,400 and 11,000	110/220	110/220	32	632
Hydro Electric Power Com. of Ontario	Nipissing	Water	1-3	60	2,200	220	110/220	.....	20
Northern Quebec Power Com., Ltd	Noranda	Water	1-3	25	11,000	550/220/110	110/220	4	251
Hydro Electric Power Com. of Ontario	North Bay R.P.D.	Water	1-3	60	2,200	220	110/220	.....	143
Hydro Electric Power Com. of Ontario	North Bay	Water	1-3	60	2,200	220	110/220	73	3,283
Hydro Electric Power Com. of Ontario	Powassan	Water	1-3	60	2,200	220	110/220	3	178
Northern Quebec Power Co., Ltd	Rouyn	Water	1-3	25	11,000	550/220/110	110/220	23	599
The Algoma District Power Co., Ltd	Sault Ste. Marie	Water	1-3	60	11,000	11,000	110/220	2	.....
Corp. of Sault Ste. Marie, Water & Light Dept	Sault Ste. Marie	Water	1-3	60	2,200	220	110	186	5,531
The Great Lakes Power Co., Ltd	Sault Ste. Marie	Water	3	25 and 60	2,300	2,300	2,300	5	4
The Abitibi Pr. & Paper Co., Ltd	Smooth Rock Falls	Water	1-3	60	550	220/110	110	11	45
Northern Ontario Power Co., Ltd	South Porcupine	Water	1-3	25	11,000 and 2,300	110/220	110/220	27	495
Corporation of Town of Sturgeon Falls	Sturgeon Falls	Water	1-3	60	2,200	220/550	220/110	90	786
The Wahnapitae Power Co., Limited	Sudbury	Water	3	60	2,300	22,500	110/220	.....	.....
Corporation of Town of Sudbury	Sudbury	Purchased	2-3	60	2,300	220	110/220	49	3,814
Northern Ontario Power Co., Ltd	Swastika	Water	1-3	60	2,400 and 11,000	110/220	110/220	5	113
The Town of Thessalon	Thessalon	Water	1-3	60	2,200	220/110	110	4	315
Canadian International Paper Co	Temiskaming	Purchased	3	60	6,600	550/220	110	.....	.....
Northern Ontario Power Co., Ltd	Timmins	Water	1-3	25	11,000 and 2,300	110/220	110/220	107	3,633
The Verner Electric Power Syndicate	Verner	Purchased	1	60	220	2,000	110	.....	63

APPENDIX H—Continued

LIST of Electric Light and Power Companies Registered under the Provisions of the Electricity Inspection Act, during the Fiscal Year ended March 31, 1929

District and Company	Address	Type of Prime Mover	Phases of System	Frequency of System	Generator Voltage	Service Voltages		Number of Meters	
						Power	Lighting	Power	Lighting
Sudbury—Concluded									
La Compagnie Electrique de Ville-Marie, Ltée	Ville Marie	Purchased	3	60	44,000	550	110	10	110
Lloyd Deagle & Co	Webbwood	Water	1-3	60	2,300	550	110/220	1	66
Total number of Meters in the District of Sudbury								978	29,376
Fort William—									
Canadian National Railways	Armstrong	Steam & Water	1-3	60	550	550	550-200/110		4
Canadian National Railways	Atikokan		D.C.		115		110		9
Town of Dryden	Dryden	Purchased	1-3	60	600	550	110	25	350
Dryden Paper Company, Ltd.	Dryden							2	33
(serving)	Dryden	Water	1-3	60	550	550	110	2	
	Eagle River	Water	1-3	60	2,300	550	110		
	Wainwright	Water	1-3	60	11,000	550	110		
Langstaff, Schurg & Company, Limited	Emo	Steam	D.C.		110		110		33
Ontario & Minnesota Power Company	Fort Frances							13	
(serving)	Station No. 1	Water	1-3	60	6,600	550	110	7	
	Big Falls Station No. 2	Water	1-3	60	6,600	550	110	2	
	Crilly Station No. 3	Water	1-3	60	6,600	550	110	2	
	Calm Lake Station No. 4	Water	1-3	60	6,600	550	110	2	
Township of McIrvine	Fort Frances	Water	2-3	60	6,600		110		21
Town of Fort Frances	Fort Frances	Water	2-3	60	6,600	220	220/110	27	1,696
Hydro Electric Commission	Fort William	Purchased	1-3	60		22,000/2,300 575/230	115/230	76	6,297
Kaministiquia Power Co., Ltd	Fort William	Water	3	60	3,600/4,400	22,000/ 25,000 550/600	210/220 110/115	24	29
The Canadian Pacific Railway Co	Ignace	Steam	D.C.		250	220	110	1	2
Corporation of Town of Kenora	Kenora	Purchased	1-3	60		2,200/ 220/110	220/110	71	1,972
Keewatin Power Company	Kenora							8	
(serving)	Kenora Pr. House	Water	1-3	60	2,400	2,400	110/220	6	

	Norman Dam Pr.	Water	1-3	60	6,600	6,600	110/220	2	
The Nipigon Hydro Electric Com.	Nipigon	Purchased	1-3	60	2,200		110/220		128
Public Utilities Com. of City of Port Arthur	Port Arthur	Water	1-3	60	2,200	22,000/ 2,200/550	220/110	68	4,642
The Town of Rainy River	Rainy River	Steam	3	60	2,300		110		300
Canadian Pacific Railway Co.	Schreiber	Steam	D.C.			250/125	250	125	2
Town of Sioux Lookout	Sioux Lookout	Steam	3	60	2,200	110/220	110	3	415
National Transcontinental Railway	Sioux Lookout	Steam	3	60	2,200	550	110		13
Total number of meters in the Dist. of Fort William								318	15,913
Winnipeg—									
The Town of Beausejour	Beausejour	Purchased	1-3	60	2,200	550	110	31	194
Boissevain Municipal Elec. Lt. &Plant	Boissevain		3	60	2,400	110/220	110		180
The Town of Birtle	Birtle	Oil	1-3	60	2,300	220	110/220	3	85
Canada Gas & Electric Corporation	Brandon	Steam	1-3	60	2,300	2,300	120	152	3,423
The Town of Carberry	Carberry	Steam	1-2	60	2,300		115		210
The Town of Dauphin	Dauphin	Steam	1-2-3	60	2,300	220	110	49	909
The Town of Emerson	Emerson	Purchased	1-3	60	2,200	2,200	110		170
D. H. Nickolishen	Ethelbert	Gasoline	D.C.			110	110		
Keenan & Thomson	Gilbert Plains	Oil	D.C.			125	125		9
Echo Flour Mills Company, Ltd	Gladstone	Steam	3	60	550				2
The Gladstone Municipal Elec. Lt. & Pr. Dept	Gladstone	Purchased	3	60	550		110		150
W. M. Bickel Estate	Grandview	Oil	D.C.			125	110/150		21
A. Coblentz & Son	Gretna	Purchased	1	60		220	110	1	77
James M. McDonald	Griswold	Oil	D.C.			110	110		
The Town of Hartney	Hartney		1-3	60	2,300	2,300	110	31	126
L. Lawlor	Kenton	Gas	D.C.			110	110		6
Killarney Municipal Lt. & Pr. Dept	Killarney	Steam	1-3	60	2,300	110	110	3	230
Citizens Electric Company	Lenore		D.C.				115		
Fraser & Empson Limited	Letellier		D.C.			57	57		
Town of Melita	Melita	Steam	D.C.			120	110/120		178
Samuel Robert Voas	Melita	Steam	D.C.			120	120	120	150
The Town of Neepawa	Neepawa	Steam	1-3	60	2,300	230	115	34	437
Manitoba Paper Company, Ltd	Pine Falls	Purchased	3	60		6,600/ 2,300/550	115/230	9	125
Corp. of Portage la Prairie	Portage la Prairie	Purchased	1-3	60	2,200	110/220/550	110	87	1,179
Town of Rapid City	Rapid City		3	60	2,200		110		106
Rural Municipality of Pipestone	Reston	Oil	D.C.			120	120		130
Canadian National Railways	Rivers	Steam	3	60	2,200	550	110		
The Town of Rivers	Rivers	Purchased		60	2,200	220	110	1	172
Village of Roblin	Roblin	Oil	3	60	2,200	220	110	9	107
The Town of Russell	Russell	Oil	3	60	2,200	220	110	3	200
The Village of Shoal Lake	Shoal Lake	Oil	D.C.			230	230	110	10	161
The Selkirk Electrical Dept	Selkirk	Purchased	3	60	2,200	220	110	15	900

APPENDIX H—Continued

LIST of Electric Light and Power Companies Registered under the Provisions of the Electricity Inspection Act, during the Fiscal Year ended March 31, 1929

District and Company	Address	Type of Prime Mover	Phases of System	Frequency of System	Generator Voltage	Service Voltages		Number of Meters	
						Power	Lighting	Power	Lighting
Winnipeg—Continued									
Town of Souris Electric Lt. & Power	Souris	Gas	D.C.		240	220/110	110	19	290
P. T. Barkman & Sons	Stienbach	Steam	D.C.		125	110	110	5	88
The Town of The Pas	The Pas	Purchased	1-3	60	2,300	220	110/220	24	735
M. A. Erickson Power Company	Westhope		1-3	60	2,300	110/220	110/220	3	65
Manitoba Power Commission	Winnipeg	Purchased	1-3	60	2,300	2,300/220	220/110	*429*	*3,052*
(Serving)	Altamont							8	21
	Cardinal							1	7
	Carman							56	306
	Crystal							17	107
	Cypress							6	54
	Darlingford							5	50
	Elm Creek							17	66
	Glenboro							12	123
	High Bluff							1	26
	Holland							7	85
	Homewood							2	9
	La Riviere							5	58
	Manitou							20	155
	Miami							11	90
	Minnedosa							43	379
	Morden							55	318
	Myrtle							2	16
	Notre Dame de Lourdes							12	43
	Oakville							8	87
	Pilot Mound							9	101
	Portage la Prairie								
	Rathwell							4	42
	Roland							15	144
	Rosebank							3	20
	Somerset							10	64
	Sperling							9	48
	Swan Lake							12	47
	Treherne							12	114
	Virden							59	367
	Winkler							8	105

Manitoba Power Company, Ltd.	Winnipeg							6	95
(Serving)	Central Manitoba Mines District							2	
	Great Falls	Water	3	60	11,000	550	110	1	5
	Municipality of Lac Du Bonnet							1	90
	Pine Falls							2	
National Utilities Corporation Ltd.	Winnipeg							*14*	*442*
(Serving)	Benito		1-3	60	2,300	220	110		
	Bowsman		1-3	60	2,300	220	110		40
	Deloraine		1-3	60	2,300	220	110	7	152
	Durban		1-3	60	2,300	220	110		
	Hamiota		1-3	60	2,300	220	110	1	92
	Kenville		1-3	60	2,300	220	110		
	Swan River		1-3	60	2,300	220	110	6	158
Suburban Rapid Transit Company	Winnipeg	Purchased						*41*	*5,413*
(Serving)	Assiniboia Municipality							9	328
	Charleswood Municipality							1	107
	St. James Municipality							23	4,848
	Tuxedo Town							8	130
Winnipeg Electric Company[P]	Winnipeg	Water & Steam	1-3	60	2,200	2,200/550 12,000/ 22,000	110	*1,137*	*26,385*
(Serving)	East Kildonan Municipality							11	2,305
	Fort Garry Municipality							13	929
	St. Boniface City							159	5,061
	St. Vital Municipality							10	3,309
	Transcona Town							3	14
	Village of Penawa								3
	West Kildonan Municipality							13	1,758
	Winnipeg City							928	13,006
Winnipeg Selkirk Lake Winnipeg Ry.	Winnipeg	Purchased						*55*	*587*
(Serving)	Rockwood Municipality							18	267
	Stoney Mountain Municipality							1	71
	St. Andrews Municipality							28	134

APPENDIX H—Continued

LIST of Electric Light and Power Companies Registered under the Provisions of the Electricity Inspection Act, during the Fiscal Year ended March 31, 1929

District and Company	Address	Type of Prime Mover	Phases of System	Frequency of System	Generator Voltage	Service Voltages		Number of Meters	
						Power	Lighting	Power	Lighting
Winnipeg—Concluded									
	St. Paul Municipality							8	115
City of Winnipeg Hydro Electric System	Winnipeg	Water&Purchased	3	60	6,600	220/550/2,400	115/120	*1,280*	*62,190*
(Serving)	Beausejour							2	
	Birds Hill							7	88
	Brooklands							2	670
	East Kildonan							4	490
	Fort Garry								39
	Garson (Tyndall)							2	1
	Old Kildonan							1	47
	Pointe du Bois							1	40
	Rosser								22
	Saldo							1	
	Stony Mountain							2	49
	Transcona							20	1,705
	Tuxedo							3	57
	West Kildonan							2	257
	Winnipeg							1,233	58,725
The Traders' Building Association, Ltd	Winnipeg	Purchased	1-3	60		550	110	1	212
The Canadian Pacific Railway Co	Winnipeg Beach	Oil	3	60	2,100	220	110	6	18
Total number of meters in District of Winnipeg								3,458	109,209
Regina—									
J. J. Heinricks	Aberdeen		D.C.		125		110		42
Joseph Schmidt	Allan	Oil	D.C.		115		110		35
H. Fischman	Bateman	Kersosene	D.C.				110		19
The Town of Battleford	Battleford	Purchased	3	60	2,300	220	115	15	234
Thornton Brothers	Bengough	Gasoline	D.C.		125	110	110		50
Bienfait Commercial Co	Bienfait		3	60	2,300	220	110	12	68
H. L. Knelson	Bladworth	Oil	D.C.		125		110		25
Blaine Lake Light & Power Co	Plaine Lake	Oil	D.C.		115		110		56
A. P. Weatherby	Borden	Oil	D.C.		125		110		39
Henderson Brothers	Bounty	Oil	D.C.		125	110	110		15

Pearson Motor Co.	Bromhead	Oil	D.C.			115		110		
Electric Light & Power Co.	Bruno	Oil	D.C.			115		110		73
Cabri Light & Power Co.	Cabri	Oil	D.C.			125		110		120
Town of Canora	Canora	Oil	1-3	60	2,200	220	110	1		196
Magee & Snider	Carmichael	Oil	D.C.			125	110	110		4
J. C. A. Perry	Central Butte	Oil	D.C.			125	110	110		20
Ceylon Motors Limited	Ceylon	Oil	D.C.			125	110	110		40
Joseph E. Nerada	Climax	Oil	D.C.			115	110	110		29
W. J. Best	Coderre	Oil	D.C.			120	110	110		35
Colonsay Electric Co.	Colonsay		D.C.			125	110	110		43
R. M. Bennett & Son	Conquest	Oil	1-3			125		110		42
Harry M. Ching	Coronach					115		110		12
Village of Cudworth	Cudworth	Oil	D.C.			125/250		115/230		78
Cupar Electric Light Plant	Cupar	Oil	D.C.			125		110		93
C. A. Barsaloux	Cut Knife	Oil	D.C.			125	110	110	8	66
The Delisle Electric Light Co.	Delisle		D.C.			125	125	110		64
L. E. Jones Co.	Dinsmore		D.C.			125	110	110		35
Pierre Legault	Domremy		D.C.			125		110		38
Electric Light Plant	Drake	Oil	D.C.			115		110		27
Service Electrique	Duck Lake	Oil	D.C.			115		110		40
Village of Dunblane	Dunblane	Purchased	1-3	60	2,200		110/220			52
Eston Machine & Auto Co.	Eston		D.C.			115	110	110		80
Wallis & Clennd	Eatonia	Oil	D.C.			125	110	110	1	32
Village of Elfros	Elfros		D.C.			125		110		56
Village of Elrose	Elrose	Oil	D.C.			115		110	1	62
Englefeld Power Co.	Englefeld		D.C.			125		110		
Eyebrow Light Plant	Eyebrow		D.C.			125	125	125		80
Charles Robertson	Fife Lake	Oil	D.C.			125		110		14
A. W. Evans & Co.	Glenavon	Gas	D.C.			125	110	110		7
Glidden Garage	Garage		D.C.			125		110		9
Joseph Schaeffer	Handel		D.C.			120		110		5
Electric Light Plant	Hanley	Oil	D.C.			120		110		52
Village of Hawarden	Hawarden		D.C.			125		110		34
Robert Galbraith	Herschel		D.C.			125		110		24
Philip Pendlebury	Hodgeville	Oil	D.C.			125	110	110	1	40
The Corporation of Humboldt	Humboldt	Steam	1-3	60	2,300	550/220	110	89		420
Northern Light & Power Co.	Indian Head									
(Serving)	Abernethy		1-3	60	2,300	220	110			53
	Balcarres		1-3	60	2,300	220	110			111
	Broadview		1-3	60	2,300	220	110	2		191
	Fleming		1-3	60	2,300	220	110			24
	Greenfell	Oil	1-3	60	2,300	220	110	2		200
	Indian Head		1-3	60	2,300	220	110	14		366
	Lemberg		1-3	60	2,300	220	110			83
	Moosomin		1-3	60	2,300	220	110	10		228
	Neudorf		1-3	60	2,300	220	110			43
	Rocanville		1-3	60	2,300	220	110	1		43
	Wapella		1-3	60	2,300	220	110			72
	Whiteword		1-3	60	2,300	220	110			84
	Wosleley		1-3	60	2,300	220	110	4		200
Ituna Electric Light & Power Co.	Ituna	Oil	D.C.			125	110			29

APPENDIX H—Continued

LIST of Electric Light and Power Companies Registered under the Provisions of the Electricity Inspection Act, during the Fiscal Year ended March 31, 1929

District and Company	Address	Type of Prime Mover	Phases of System	Frequency of System	Generator Voltage	Service Voltages		Number of Meters	
						Power	Lighting	Power	Lighting
Regina—Continued									
Town of Kamsack	Kamsack	Oil	1-3	60	2,300	2,300/550/220	110	17	341
Keeler Electric Light Co., Ltd	Keeler	Gas	D.C.		125		110		
William Humphreys	Kelliher	Oil	D.C.		120		110		33
W. E. Gardner	Kennedy	Oil	D.C.		125		110	9	37
Grosser Electric	Kerrobert	Oil	D.C.		240/120	220	110	1	180
Canadian Utilities Limited	Kindersley	Oil	1-3	60	2,300	230	115	5	263
Henry Mann	Kipling	Oil	D.C.		125	110	110		83
The Kyle Garage Co	Kyle		D.C.		125		110		12
Village of Lake Lenore	Lake Lenore	Oil	D.C.		125	110	110		36
Lancer Garage	Lancer	Oil	D.C.		125		110		1
Landis Garage & Machinery	Landis	Oil	D.C.		125		110		24
The Rex Garage Co	Langenburg	Oil	D.C.		125		110		14
The Town of Langham	Langham	Gas	1-3	60	2,200		110		96
The Town of Lanigan	Lanigan	Oil	1-3	60	2,200	110	110		72
Lashburn Electric Power Plant	Lashburn	Oil	D.C.		125	110	110		100
Oswald Schneider	Leader	Gas	D.C.		125		110		90
Village of Leslie	Leslie	Oil	D.C.		120		110		20
Charles E. Haile	Lestock	Oil	D.C.		125		110		25
Canadian Utilities Limited	Lloydminster	Oil	3	60	2,300	220	110	28	382
Ray Eldred	Lockwood	Gasoline	D.C.		120	110	110		18
James Arthurs	Laverna	Oil	D.C.		125		110		22
Lucky Lake Motors, Ltd	Lucky Lake	Oil	D.C.		125	110	110		60
Finley Brothers	Luseland	Oil	D.C.		125		110		60
N. A. Brown	Macklin	Oil	D.C.		125	110	110		47
Carl E. Hastings	Maidstone	Oil	D.C.		125	110	110	1	22
Edward E. Koepke	Melaval	Oil	D.C.		125		110		7
William Henry Bagot	Manor		D.C.		125	110	110		18
Maple Creek Light, Power & Milling Co.	Maple Creek	Steam	1-3	60	2,200	220	110	5	300
Village of Marcelin	Marcelin	Kerosene	D.C.		115	110	110		40
H. M. Folhaver	Marquis	Oil			125		110		23
Stewart Brothers	Maryfield	Oil	D.C.		120	110	110		45
Robert Downing	Maymont	Oil	D.C.		125	110	110		8
William Henry Precious	Mazenod	Oil	D.C.		125		110		6
Town of Melfort	Melfort		1-3	60	2,200	220	110	24	436
William Prosser	Mervin	Oil	D.C.		125		110		35
John W. Deshaw	Milden	Oil	D.C.		125	110	110		38

Anton Hipfner	Montmartre	Oil	D.C.			125		110		24
City of Moose Jaw	Moose Jaw	Steam	1-3	60		4,000	220/440/550	110	275	5,347
Town of Morse	Morse	Gas	1-3	60		2,300	220	110	2	90
Hodges, Kablo & Co	Mortlach	Gas	D.C.			125		125		9
Alex. L. Thompson	Mossbank	Oil	D.C.			125		110		50
John W. Padbury	Naicam		D.C.			125	110	110		4
Floyd Hupp	Niedpath	Oil	D.C.			110	110	110		4
E. E. Bakrud	Neville	Kerosine	D.C.			115	115	110		34
Canadian Utilities Limited	Nokomis	Oil	1-3	60		2,300	220/110	110	5	126
(Serving)	Duval		3	60		2,300	220/110	110		42
	Govan		1-3	60		2,300	220/110	110	3	142
	Imperial		1-3	60		2,300	220/110	110	3	94
	Manitou Beach		3	60			220/110	110		8
	Semans		1-3	60		2,300	220/110	110	4	119
	Simpson		1-3	60		2,300	220/110	110	1	55
	Strasbourg		1-3	60		2,300	220/110	110	3	147
	Watrous		1-3	60		2,300	220/110	110	17	304
	Young		1-3	60		2,300	220/110	110	2	76
The Norquay Electric	Norquay	Oil	D.C.				115	110		30
City of North Battleford	North Battleford		1-3	60		2,300	220	110/220	80	1,060
Montana Dakota Power Co	North Portal	Steam	1-3	60		2,300	220	110	3	52
Village of North Regina	North Regina	Purchased	1-3	60		2,300		110		95
J. C. Fish	Ogema	Oil	D.C.			125		110		78
The Town of Outlook	Outlook	Gas	3	60		2,300	110	110	1	185
Nick Oberle	Pangman	Oil	D.C.			125	110	110		24
Pelly Electric Light & Power Co	Pelly	Oil	D.C.			115	110	110		43
Samuel Pace	Perdue	Oil	D.C.			125		110		77
F. Dalton	Prueville	Oil	D.C.			125	110	110		30
John Sept. Jr	Prelate	Oil	D.C.			125		110	1	43
City of Prince Albert	Prince Albert	Steam	1-3	60		2,200	550/220/110	220/110	86	1,809
Punnichy Electric Light Co	Punnichy	Oil	D.C.			120	110	110		43
Village of Quill Lake	Quill Lake		D.C.			125	110	110		33
The Town of Radisson	Radisson	Oil	D.C.			120	110	110		95
Emil Bergum	Ratcliffe	Gasoline	D.C.			125		110		1
Rice Brothers	Raymore		D.C.			120		110		40
H. G. Llewellyn	Readlyn					34		32		11
Foster Ross	Redvers	Oil	D.C.			120		110		25
Estate of J. S. Donahue	Regina	Purchased	1-3	60		4,000		110		65
Dominion Electric Power, Ltd. (serving)	Regina—									
	Admiral	Purchased	1-3	60		2,400	220	110		50
	Aneroid	Purchased	1-3	60		2,400	220	110	3	111
	Assiniboia		1-3	60		2,400	220	110	32	437
	Biggar		1-3	60		2,300	220	110	32	510
	Cadillac	Purchased	1-3	60		2,400	220	110		50
	Craik		1-3	60		2,300	220	110	5	123
	Craighton	Purchased	1-3	60		2,400	220	110		15
	Davidson		1-3	60		2,300	220	110	19	168
	Eastend		1-3	60		2,300	220	110		73
	Estevan		1-3	60		2,300	220	110	38	774
	Gravelbourg		1-3	60		2,300	220	110	15	276
	Gull Lake		1-3	60		2,400	220	110	10	216

APPENDIX H—Continued

LIST of Electric Light and Power Companies Registered under the Provisions of the Electricity Inspection Act, during the Fiscal Year ended March 31, 1929

District and Company	Address	Type of Prime Mover	Phases of System	Frequency of System	Generator Voltage	Service Voltages		Number of Meters	
						Power	Lighting	Power	Lighting
Regina—Continued									
Dominion Electric Power, Ltd.—*Concluded*	Regina—								
Serving	Hazenmore	Purchased	1-3	60	2,400	220	110		67
	Herbert		1-3	60	2,400	220	110	14	188
	Instow	Purchased	1-3	60	2,400	220	110		15
	Kincaid	Purchased	1-3	60	2,400	220	110		75
	La Flache	Purchased	1-3	60	2,400	220	110	3	138
	Limerick	Purchased	1-3	60	2,400	220	110	2	101
	Melville		1-3	60	2,400	220	110	24	623
	Mayronne	Purchased	1-3	60	2,400	220	110		73
	Ponteix	Purchased	1-3	60	2,400	220	110	1	146
	Radville		1-3	60	2,300	220	110	5	214
	Scotsguard	Purchased	1-3	60	2,400	220	110		40
	Shaunavon		1-3	60	2,400	220	110	41	490
	Woodrow	Purchased	1-3	60	2,400	220	110		65
J. M. W. Gallagher	Regina	Purchased	1-3	60	4,000		110		6
McCallum Hill Building Co	Regina	Purchased	D.C. & 3	60	220/110	2,200	110		63
Montreal Engineering Co., Ltd.	Regina—								
(serving)	Alameda	Purchased	1-3	60	2,300	220	110		26
	Arcola	Purchased	1-3	60	4,000	220	110		128
	Avonlea	Purchased	1-3	60	4,000	220	110	1	81
	Balgonie	Purchased	1-3	60	4,000	220	110	2	67
	Belle Plaine	Purchased	1-3	60	4,000	220	110		16
	Briercrest	Purchased	1-3	60	4,000	220	110	1	53
	Carlyle	Purchased	1-3	60	4,000	220	110	2	97
	Carnduff	Purchased	1-3	60	2,300	220	110	6	95
	Corinne	Purchased	1-3	60	4,000	220	110		10
	Creelman	Purchased	1-3	60	4,000	220	110		33
	Drinkwater	Purchased	1-3	60	4,000	220	110	2	60
	Fillmore	Purchased	1-3	60	4,000	220	110		67
	Forget	Purchased	1-3	60	4,000	220	110		16
	Fort Qu'Appelle	Purchased	1-3	60	4,000	220	110	2	99
	Francis	Purchased	1-3	60	4,000	220	110		41
	Frobisher	Purchased	1-3	60	2,300	220	110		11
	Fronde	Purchased	1-3	60	4,000	220	110		5
	Glen Ewen	Purchased	1-3	60	2,300	220	110	1	16
	Grand Coulee	Purchased	1-3	60	4,000	220	110		5

	Griffin	Purchased	1-3	60	4,000	220	110		25
	Howard	Purchased	1-3	60	4,000	220	110	1	15
	Kisbey	Purchased	1-3	60	4,000	220	110		45
	Lajord	Purchased	1-3	60	4,000	220	110		17
	Lang	Purchased	1-3	60	4,000	220	110	3	82
	Lebret	Purchased	1-3	60	4,000	220	110	1	24
	Lipton	Purchased	1-3	60	4,000	220	110		43
	Lumsden	Purchased	1-3	60	4,000	220	110	1	128
	McLean	Purchased	1-3	60	4,000	220	110		16
	McTaggart	Purchased	1-3	60	4,000	220	110		7
	Milestone	Purchased	1-3	60	4,000	220	110	2	114
	Osage	Purchased	1-3	60	4,000	220	110		17
	Oxbow	Purchased	1-3	60	2,300	220	110	1	130
	Pasqua	Purchased	1-3	60	4,000	220	110		11
	Pense	Purchased	1-3	60	4,000	220	110	3	75
	Qu'Appelle	Purchased	1-3	60	4,000	220	110	4	115
	Rouleau	Purchased	1-3	60	4,000	220	110	2	174
	Sedley	Purchased	1-3	60	4,000	220	110	2	39
	Stoughton	Purchased	1-3	60	4,000	220	110		51
	Tyvan	Purchased	1-3	60	4,000	220	110		16
	Wilcox	Purchased	1-3	60	4,000	220	110	2	82
	Yellow Grass	Purchased	1-3	60	4,000	220	110	6	139
Regina Municipal Light & Power Plant	Regina	Steam	1-3	60	4,000	110/220/4,000	110/220	584	11,707
The Saskatchewan Co-Operative Creameries	Regina	Purchased	3	60	4,400	220	110	1	2
Riverhurst Power & Light Co	Riverhurst	Oil	D.C.		12	110	110		50
Rockglen Electric Co	Rockglen	Oil	D.C.		220/110	110			30
Canadian Utilities Ltd	Rosetown		1-3	60	2,300	230	115	19	334
Town of Rosethern	Rosethern	Oil	1-3	60	2,300	220	110	7	239
L. T. Whittaker	Selvador				125	110	110		15
The City of Saskatoon	Saskatoon	Steam	1-2	60	2,300	220	110	1,956	9,620
The Town of Scott	Scott	Oil	1-3	60	75	220	110		45
Town of Sintaluta	Sintaluta		D.C.		125	110			72
J. E. C. Bourk	Springwater	Oil	D.C.		125	110	110		16
Star City Light & Power Co	Star City	Oil	1-3	60	2,200		110		95
Elmer Moulton	St. Boswells	Gas	D.C.		125		110		26
J. L. McLeod	Steven	Oil			120		120		22
Summerberry Supply Co	Summerberry	Oil	D.C.		12		110		13
Sutherland Electric Co., Ltd	Sutherland	Purchased	1-3	60	2,300	220	110	1	208
The City of Swift Current	Swift Current	Oil & Gas	3	60	4,200	4,200/220	110	169	1,236
Carrot River Valley Mills, Ltd	Tisdale	Steam	1-3	60	2,300	2,300	110		200
(Serving)	Birch Hills	Oil	1-3	60	550	2,200	110		85
	Kinistino	Oil	1-3	60	2,300	2,300	110		12
H. H. Lee	Togo	Oil	D.C.		125		110		23
T. R. Waddington	Tompkins	Oil	D.C.		125		110	9	65
J. Douglas	Torquay	Gasoline	D.C.		110		110		8
H. J. Bowles	Truax	Oil	D.C.		125	110	110		5
George A. Turner	Tugaske	Oil	D.C.		125		110		30
The Town of Unity	Unity	Oil	1-3	60	2,200	220	110	20	222
Vanguard Electric Light Co	Vanguard		D.C.		125	110	110		60

APPENDIX H—Continued

LIST of Electric Light and Power Companies Registered under the Provisions of the Electricity Inspection Act, during the Fiscal Year ended March 31, 1929

District and Company	Address	Type of Prime Mover	Phases of System	Frequency of System	Generator Voltage	Service Voltages		Number of Meters	
						Power	Lighting	Power	Lighting
Regina—Concluded									
John J. Gerein	Vibank		D.C.		125	110	110		33
Village of Viscount	Viscount	Oil	D.C.		120	110	110	5	70
T. M. Smith	Viceroy	Oil	D.C.		125	110	110		14
The Town of Vonda	Vonda	Gas	1-3	60	2,200	220	220	110	99
Town of Wadena	Wadena	Gas	1-3	60	2,300		110		140
Alfred Lepine	Wakaw	Gas	D.C.		125		110		28
The Town of Watson	Watson	Oil	D.C.		125	110	110		21
McPherson Brothers	Wawota	Oil	D.C.		125	110	110		9
Frank L. Nicol	Webb	Oil	D.C.		115		110		52
Corporation of Weyburn	Weyburn	Steam	1-3	60	2,300	220	110	64	857
Canadian Utilities Ltd	Wilkie	Oil	1-3	60	2,300	230	115	3	280
A. Huel	Willowbunch	Oil	D.C.		125	110	110		80
Town of Wynyard	Wynward	Oil	1-3	60	2,300		110		226
Frank Townsend	Verwood	Oil	D.C.		115	110	110		37
Canadian Utilities Ltd	Yorkton	Oil	1-3	60	2,200/2,300	220/550	110/220	78	1,050
(Serving)	Foam Lake	Oil	1-3	60	2,200/2,300	220	110	2	91
	Saltcoats	Oil	1-3	60	2,200/2,300		110		126
Total member of meters in District of Regina								3,944	52,891
Calgary—									
Parks Branch, Dept. of Interior	Banff	Water	1-3	60	2,200	220/110	110	5	706
C.P.Ry., Dept. of Natural Resources	Bassano	Water	3	60	2,400			1	
West Canadian Collieries Ltd	Blairmore	Purchased	1-3	60		2,300	110/220	30	110
West Canadian Collieries Ltd	Blairmore-Bellevue Plant	Purchased	1-3	60		2,300	110/220	8	310
Town of Blairmore	Blairmore	Purchased				220	110	18	400
Electric Light Department	Calgary	Purchased	1-3	60	2,300	220	110	685	18,539
The Calgary Water Power Co., Ltd	Calgary	Steam and water	1-3	60	2,200	220	105	140	2,300
Forest Lawn Power & Light Co., Ltd	Calgary	Purchased	1-3	60		220	110/220	1	65
Calgary Power Company Limited	Calgary		1-3	60		220	110	229	3,428
(serving)	Acme							5	84
	Airdrie							1	39
	Aldersyde							4	8
	Barnwell							1	13

Parons							3	83
Beiseker							1	44
Blackie							8	87
Bowden							2	45
Brant							7	33
Calgary sub-station							14	
Carmangay							5	80
Carstairs							1	70
Cayley							2	39
Champion							9	88
Chin							1	1
Claresholm							13	283
Coaldale							3	30
Coalhurst							2	10
Cochrane							1	
Connemara							1	1
Crossfield							3	70
DeWinton Oil well service							1	1
Diamond City							1	6
Didsbury							6	194
Donaldson Mine							1	
Elcan Mine Service							1	
Ensign							3	15
Exshaw sub-station							2	
Granum							6	21
Hardieville Substation							1	
High River							27	376
Horseshoe Falls Plant								
Innisfail							6	252
Irricana								34
Jamieson							1	1
Kananaskis Falls Plant								
Kathyrn								7
Keoma							1	6
Kirkcaldy							3	6
Lethbridge							2	
Magrath							5	220
Majestic Collieries Service							1	
Maybutt							1	8
Mazeppa							1	4
Monarch							1	16

APPENDIX H—Continued

LIST of Electric Light and Power Companies Registered under the Provisions of the Electricity Inspection Act, during the Fiscal Year ended March 31, 1928

District and Company	Address	Type of Prime Mover	Phases of System	Frequency of System	Generator Voltage	Service Voltages		Number of Meters	
						Power	Lighting	Power	Lighting
Calgary—Concluded									
Calgary Power Company Ltd.—*Concluded*	Calgary		1-3			220			
(serving)—	Morley								4
	Nanton							11	220
	Nobleford							1	33
	Okotoks							6	146
	Olds							20	268
	Parkland							2	24
	Peacock Siding							4	1
	Penhold							2	30
	Rock Springs Mine							1	
	Staveley							7	84
	Stirling								75
	Taber							11	262
	Tempest							2	1
	Vulcan							1	
	Woodhouse							3	5
United Electric & Engineering Co., Ltd.	Calgary					2,200	110	44	694
(serving)	Arrowwood							9	69
	Bassano							5	173
	Cluny							4	54
	Gleichen							8	160
	Rockyford							4	64
	Standard							6	54
	Strathmore							8	120
The Canmore Coal Co., Ltd.	Canmore	Steam	3	60	2,400	2,200/440/220/110	110	29	135
Parks Branch, Dept. of Interior	Canmore	Steam	1-3	60	2,200		110		107
Town of Cardston	Cardston		2	60	2,200	110	110	10	370
Canadian Utilities Limited	Castor	Oil	1-3	60	2,300	220	110/220	4	139
Cooley Bros.	Chinook	Gasoline	D.C.		115	115	115		42
Coal Producers Limited	Coalhurst	Steam	1-3	60	2,300	110	110		178
Village of Cochrane	Cochrane	Purchased							97
Coleman Light & Water Co., Ltd.	Coleman	Purchased	3	60	2,300	2,300	220/110	27	515
International Coal & Coke Co., Ltd.	Coleman	Purchased	3	60	2,300	2,300	220/110	12	1
McGillivray Creek Coal & Coke Co., Ltd.	Coleman	Purchased	3	60	2,300	2200/440/220	110/220	2	19

Canadian Utilities Limited	Coronation	Purchased						6	186
Southern Utilities Company Ltd	Coutts	Purchased	3	60		220/440/6900	110/220	3	52
Alberta Block Coal Co., Ltd	Drumheller	Steam	3	60	2,500	250	125	3	
Union Power Company Limited (serving)	Drumheller	Steam	1-3	60	2,200	2,200/220	220/110	213	2,927
	Big Valley							5	140
	Carbon							11	127
	Craigmyle							13	71
	Delia							13	108
	Drumheller							81	1,499
	Equity							3	2
	Hanna							39	407
	Hesketh								10
	Mecheche							3	23
	Morrin							3	47
	Munson							3	52
	Swalwell							2	31
	Three Hills							16	182
	Trochu							14	120
	Wayne							7	118
Endiang Board of Trade	Endiang	Gasoline	D.C.		125	125	110/125		3
Hillcrest Collieries Limited	Hillcrest	Purchased	3	60	2,300	550	110	1	18
Hill Spring Light & Power Co	Hill Spring		3	60	110		110		27
East Kootenay Power Co., Ltd	Fernie, B.C	Water and steam	3	60	2,300/6,600	66,000/2,300	220/110	8	
Village of Frank	Frank	Purchased	1	60			110		63
City of Lethbridge	Lethbridge	Steam	1-3	60	2,300	2300/220/110	110/220	210	3,243
The Town of Macleod	Macleod	Gas	1-3	60	2,300	220	110	27	448
Corporation of City of Medicine Hat	Medicine Hat	Steam	1-3	60	2,300	2,300/220	115	75	1,851
Johnson's Garage	Oyen				125	125	115		75
Town of Pincher Creek	Pincher Creek	Steam	1-3	60	2,200	220	110	9	296
Canadian Utilities Limited	Raymond	Oil	1-3	60	2,200	2,200/220	220/110	12	327
Elmer O. Merriman	Retlaw		D.C.		125		110		
Can. Pac. Ry. Dept of Natural Resources	Strathmore Irrigation Hdqters	Purchased	1-3	60		220	110	1	17
Vulcan Light & Power Co., Ltd	Vulcan	Purchased	1-3	60		220	110	24	307
Jewel Collieries Limited	Wayne	Purchased	3	60	2,200	220	110		25
Ideal Coal Company Limited	Wayne	Purchased	3	60		220	110	1	21
The Rose Deer Coal Mining Com., Ltd	Wayne	Purchased	3	60		220	110		
Wallace C. Auld	Youngstown				110	110	110	1	77
Total number of meters in district of Calgary								1,839	38,128
Edmonton—									
Athabaska Light & Power Co	Athabaska	Steam	1-3	60	2,200		110/220		
Edward G. Hooper	Barrhead	Oil	D.C.		120	120	120		18
Thorp Brothers	Bentley	Gasoline	D.C.		115		115		28
Hector Mateux	Bonnyville	Oil			110	110	110		10
Cadomin Coal Co., Ltd	Cadomin	Steam	1-3	60	2,300	220/550/110	110		
The Town of Camrose	Camrose	Steam	1-3	60	2,300	220	110	42	610
Canadian Utilities Limited	Castor	Oil	1-3	60	2,300	230	115	15	510

APPENDIX H—Continued

LIST of Electric Light and Power Companies Registered under the Provisions of the Electricity Inspection Act, during the Fiscal Year ended March 31, 1929

District and Company	Address	Type of Prime Mover	Phases of System	Frequency of System	Generator Voltage	Service Voltages		Number of Meters	
						Power	Lighting	Power	Lighting
Edmonton—Concluded									
Union Power Co., Ltd	Drumheller	Steam	1-3	60	2,300	220	110		
(serving)	Botha							1	37
	Erskine							2	44
	Stettler							28	361
Edberg Hardware Co	Edberg		D.C.		110	110	110/120		6
The Calgary Power Co., Ltd	Edmonton	Steam	1-3	60	2,300	220	220/110	2	
(serving)	Bruderheim							1	69
	Chipman							4	75
	Clyde								17
	Fort Saskatchewan							3	232
	Lamont							3	120
	Leduc							5	204
	Millet								54
	Morinville								52
	St. Albert								27
Marcus Coals Limited	Edmonton	Purchased	3	60		440	110	1	1
City of Edmonton Elec. Light & Power Dept	Edmonton	Steam	3	60	2,200/13,200	220/2,200	110/220	497	18,913
The Edson Light & Power Co	Edson	Steam	1-3	60	600	220	110	11	360
Grand Trunk Pacific Railway	Edson	Steam	3	60	550	550	110		1
Dr. F. G. Miller and Dr. A. G. Ross	Elk Point	Gasoline	D.C.		125		110		13
Coal Producers Limited	Evansburg	Steam	D.C.		250	250	250		
Canadian Utilities Limited	Grande Prairie	Oil	1-3	60	2,300	230	115	8	255
Canadian National Parks	Jasper	Steam	1	60	2,200	110/220	110	2	284
Grand Trunk Pacific Railway	Jasper	Steam	3	60	2,200	550	110	2	
Joseph Giguere	Lac La Biche		D.C.		110		110		27
The Town of Lacombe	Lacombe	Steam	1-3	60	2,300	220	110	55	365
Walter D. Umiker and Robert Gray	Marwayne		D.C.		110		110		10
E. B. Loucks	Mayerthorpe	Oil	D.C.		125	125	125		29
McLeod River Collieries Ltd	Mercoal		3	60	440	440/220	110	7	2
Mountain Park Collieries Ltd	Mountain Park	Steam	D.C.		250	250	250		6
Brazeau Collieries	Nordegg	Steam	3	60	2,400	440	110	3	236
J. H. J. Yeoman	Onoway	Oil	D.C.		125	125	120		27
Municipality of Peace River	Peace River		1-3	60	2,300	110/220	110	2	118
Picardville Garage	Picardville	Gasoline	D.C.		125		110		9
Town of Ponoka	Ponoka	Purchased	1-3	60	2,300/13,200	220	110	23	237

C. A. Mack	Radway	Gasoline	D.C.		110		110		20
Calgary Power Co., Ltd.	Red Deer	Steam	3	60		13,200/2,300		2	
(serving)	Alix								28
	Bashaw								105
	Blackfolds								10
	Clive							1	36
	Minor								90
	Ponoka							1	
Red Deer Electric Light & Power Dept.	Red Deer	Purchased	1-3	60	2,300	220	110	33	657
A. E. Drader	Rimbey	Oil	1-3	60	600		110		52
Charles W. Shirrington	Sangudo		D.C.		120	120	120		12
Spirit River Garage	Spirit River	Gasoline	D.C.				115		26
Armbruster Lumber Co.	Stony Plain	Oil	1	60	220	110	110	1	65
Calgary Power Co., Ltd.	St. Paul	Oil	1-3	60	2,200	220	220/110	3	162
D. A. and H. H. Jamieson	Sylan Lake		D.C.		110	110	110		8
Joseph Bawol	Thorhild		D.C.		125	110			
Alex Wakaluk	Two Hills		D.C.		120	120	120		9
Canadian Utilities Limited	Vegreville	Oil	1-3	60	2,300	230	115	52	742
Town of Vermilion	Vermilion	Steam	1-3	60	2,300	2,300	110	30	371
McAchey & Jones	Viking				130	110	110		17
W. W. Walker	Wabamun	Oil			32	32	32		1
Calgary Power Co., Ltd.	Wainwright	Steam	1-3	60	2,300	220	220/110	13	276
(serving)	Bawlf								59
	Daysland							3	83
	Hardisty							1	149
	Irma							1	61
	Killam							2	102
	Lougheed								60
	Sedgewick								63
	Strome								41
Ernest W. McNee	Waskatenau	Oil	D.C.		120	120	120		42
Calgary Power Co., Ltd.	Westlock	Oil	D.C.		110		110		112
City of Wetaskiwin	Wetaskiwin	Gas and steam	1-2	60	2,300	220	110	51	526
Willingdon Electric Co.	Willingdon		D.C.		110		110		20
Total number of meters in district of Edmonton								911	27,372
Nelson—									
Corporation of City of Armstrong	Armstrong	Water & Oil	3	60	2,300	110/220/440/2,200	110	12	290
Adams River Lumber Company, Ltd.	Chase	Steam	1	125	1,100		110		
Corporation of City of Cranbrook	Cranbrook	Purchased	1-3	60	2,200	220	110	39	950
Chas. O. Rodgers	Creston	Steam	1-3	60	2,300	220	110		
Corporation of City of Enderby	Enderby	Oil	3	60	2,200		110		180
East Kootenay Power Co., Ltd.	Fernie	Water & Steam	1-3	60	2,300/6,600	66,000/2,300	220/110	7	71
Corporation of the City of Fernie	Fernie	Purchased	1-3	60	2,300	220	220/110	23	976
Crow's Nest Pass Electric Lt. & Pr. Co., Ltd.	Fernie							10	317

APPENDIX H—Continued

LIST of Electric Light and Power Companies Registered under the Provisions of the Electricity Inspection Act, during the Fiscal Year ended March 31, 1929

District and Company	Address	Type of Prime Mover	Phases of System	Frequency of System	Generator Voltage	Service Voltages		Number of Meters	
						Power	Lighting	Power	Lighting
Nelson—Concluded									
(serving)	Coal Creek Colliery	Purchased	3	60	2,200	2,200	110/220	5	
	Michel Colliery	Purchased	3	60	2,200	2,200	110	5	317
The Canadian Pacific Railway Co	Field	Steam			125		125		27
The Corporation of City of Grand Forks	Grand Forks	Purchased	1-3	60		2,200/220	110	10	353
Corporation of City of Greenwood	Greenwood	Purchased	2	60		2,200	120		66
Corporation of City of Kaslo	Kaslo	Water	1-2	60	1,100		115/110		1
Corporation of City of Kelowna	Kelowna	Purchased	1-3	60		220	110	145	1,050
Consolidated Mining & Smelting Company of Canada, Ltd	Kimberley	Purchased	3	60	2,200/6,600	550/2,200	110/220	148	816
St. Eugene Concentrator	Moyie	Steam	1-3	60	550	550	220/110	1	51
Nakusp Electric Light & Power Co., Ltd	Nakusp	Water	3	60	2,200	110	110	2	150
Corporation of City of Nelson	Nelson	Water	2-3	60	12,000	2,200/440/220	220/110	55	1,815
The Denver Light & Power Co., Ltd	New Denver	Water	1-3	60	2,300		110		105
Corp. of the District of Peachland	Peachland	Water	1-3	60	2,200	220	110		
Corp. of the District of Penticton	Penticton	Purchased	1-3	60	4,600	110/220	110/220	140	1,284
Corp. of the City of Revelstoke	Revelstoke	Water	1-3	60	2,300	2,200/220	110	28	985
Cascade Water Pr. & Lt. Co., Ltd	Rossland	Purchased	3	60	2,300				
Okanagan Water Power Company	Rossland	Purchased							
Rossland Water & Light Company	Rossland	Purchased							
South Kootenay Water Power Company	Rossland	Purchased							
West Kootenay Power & Light Co., Ltd	Rossland	Water	3	60	2,500/7,200	60,000/20,000	2,200	97	2,160
(serving)	Bonnington No. 1 Power House							3	
	Bonnington No. 2 Power House							4	
	Bonnington & South Slocan								
	Bonnington No. 3 Power House							3	65
	Cascade								2

	Experimental Farm							2	18
	Grand Forks							12	34
	Greenwood							2	1
	Kelowna							4	
	Naramata								47
	Oliver							6	72
	Okanagan Mission								36
	Penticton							10	
	Rossland							4	288
	Summerland							2	
	Trail							44	1,597
	Ymir							1	
Corporation of City of Salmon Arm	Salmon Arm	Oil	1-3	60	2,200	220	110		242
Old Enderby Rd. Electric Light Syndic...	Salmon Arm	Oil	1-3	60	2,200	220	110		12
The Sandon Water Works & Light Co	Sandon	Water	D.C.		120/125		110		
Sicamous Hotel Power House	Sicamous	Steam			115	115	115	1	21
The Consolidated Mining & Smelting Co. of Canada, Ltd	Trail	Purchased	1-3	60		60,000 2,200/550	110/220		107
Municipality of Coldstream	Vernon	Purchased	1	60		110	110	20	64
The West Canadian Hydro Electric Corporation, Limited	Vernon	Oil	1-3	60	2,300	220	110	34	1,333
Corporation of District of Summerland	West Summerland	Purchased	1-3	60	4,700	220	115/125	13	304
Canadian Pacific Railway Company	Yahk	Steam	1-3	60	2,300		115		51
Total number of meters in District of Nelson								785	13,781
Vancouver—									
The Granby Consolidated Mining, Smelting and Power Company, Ltd	Allenby	Purchased	1-3	60	2,200	2,200/ 440/550	110/220		
The Granby Consolidated Mining, Smelting and Power Company, Ltd	Anyox	Water & Steam	1-3	60	2,300	2,300/ 440/220	220/110	200	300
Ashcroft W. E. and I. Company	Ashcroft	Oil	3	60	2,300		110		85
Britannia Mining and Smelting Co., Ltd...	Britannia Beach	Water	3	60	6,600	440/220	110	63	160
A. M. Ruddy Electric Company	Burns Lake	Gasoline			120	120	120		14
Chilliwack Electric Co., Ltd	Chilliwack	Water	3	60	2,200		110		44
Clayburn Company, Limited	Clayburn	Purchased	1-3	60		2,200/220	110	11	24
Coalmont Collieries, Ltd	Coalmont	Water	1-3	60	550	550	110		121
Canadian Western Lumber Co., Ltd	Fraser Mills	Steam	3	60	480	440	480/2,200/ 110/550	35	
Hedley Gold Mining Company, Ltd	Hedley	Water	3	60	2,200	2,200	110		4
Hope Trading and Supply Co	Hope	Oil	D.C.		110		110		8
The Corporation of City of Kamloops	Kamloops	Water & Steam	1-3	60	2,200	2,200/220	110	144	1,725
McBride Electric Limited	McBride	Steam	1-3	60	2,200		110		64

APPENDIX H—Continued

LIST of Electric Light and Power Companies Registered under the Provisions of the Electricity Inspection Act, during the Fiscal Year ended March 31, 1929

District and Company	Address	Type of Prime Mover	Phases of System	Frequency of System	Generator Voltage	Service Voltages		Number of Meters	
						Power	Lighting	Power	Lighting
Vancouver—Concluded									
Corporation of City of Merritt	Merritt	Purchased	3	60	2,400	2,400	110	1	375
Nicola Pine Mills, Ltd	Merritt	Steam	3	60	480				1
Corporation of City of New Westminster	New Westminster	Purchased	1-3	60	2,300	110/220	110	38	5,436
Pacific Mills Limited	Ocean Falls	Water	3	60	2,300/440	2,300/440/220	110	6	432
Powell River Company Limited	Powell River	Water	3	50	2,200	2,200/550	110/220	9	33
Corporation of City of Prince George	Prince George	Oil	1-3	60	2,300	2,300/110/220	110	12	600
Power Corporation of Canada, Ltd	Prince Rupert	Water	1-3	60	4,160/2,400	13,200/2,200/440/220	115/230	71	1,812
Princeton Light & Power Co., Limited	Princeton	Purchased	3	60	2,200	220	110	7	280
Cariboo Hotel Lighting Plant	Quesnell	Oil	3			115	110		15
West Kootenay Power & Light Co., Ltd	Rossland	Water	3	60	2,500/7,200	60,000/20,000	2,000	11	2
(serving)	Allenby							6	2
	Copper Mountain							2	
	Princeton							3	
Smithers Electric Limited	Smithers	Steam	3	60	2,300	220	110	1	215
International Electric Co., Ltd	Stewart	Water	1-3	60	4,400	440/220	110	1	103
Frederick C. Bishop	Terrace	Gasolene			120				13
Pacific Great Eastern Railway Co	Vancouver	Water	1-3	60	4,200	220/110	110	5	136
B.C. Electric Railway Co., Ltd	Vancouver	Steam	1-3	60	2,300	2,300/440/220/110	110	2,512	81,751
(serving)	Vancouver City							1,819	43,633
	South Vancouver							87	9,945
	Point Grey							85	10,156
	Burnaby							53	5,600
	Richmond							61	1,003
	North Vancouver							65	3,559
	West Vancouver							5	1,356
	Fraser Valley							188	4,967
	Ladner							21	471

	Port Moody							15	340
	Coquitlam							17	703
	New Westminster							96	18
Burrard Power Company, Ltd	Vancouver	Water	3	60	7,500				
Vancouver Power Company, Ltd	Vancouver	Water	3	60	2,300				
Western Power Company, Ltd	Vancouver	Water	3	60	4,400				
Total number of meters in District of Vancouver								3,127	93,753
Victoria—									
Corporation of City of Alberni	Alberni	Purchased	1	60		110	110	5	208
The Victoria Lumber & Mfg. Co., Ltd.	Chemainus	Water	1-3	60	600	600	110		218
The City of Courtenay	Courtenay	Purchased	1-3	25		2,200/220/110	110	20	590
Cumberland Electric Lighting Co., Ltd	Cumberland	Purchased	1-3	25		110/220	110	9	641
Minto Elec. Lt., Ht. & Pr. Co., Ltd	Cumberland	Purchased	1	25		110	110	3	29
Duncan Utilities Limited	Duncan	Oil	1-3	60	2,300	110/220	110	64	585
(serving)	Dist. of N. Cowichan								160
Comox Logging & Railway Co	Headquarters	Purchased	1-3	25		220	110	1	21
Canadian Explosives, Limited	James Island	Purchased	1-3	60		220	110		75
Corporation of City of Ladysmith	Ladysmith	Steam	1-3	60	2,200	220	110	9	575
Nanaimo Elec. Lt. Pr. & H'ting Co., Ltd.	Nanaimo	Steam & Water	1-3	60	2,300	2,300/220/110	110	91	2,164
(serving)	Dist. of Harewood								344
	Dist .of Brechin								136
	Dist. of N. Wellington								40
Canadian Collieries (Dunsmuir), Ltd	Nanaimo—								
(serving)	Cumberland	Water	1-3	25	13,200	2,200/440	110	7	118
	Wellington	Steam	D.C.		220/250	220/250	220/250		
Corporation of Dist. of Oak Bay	Oak Bay	Purchased	1-3	60		110	110	9	26
Parksville Lt. & Pr. & H'ting Co., Ltd	Parksville	Oil	D.C.		120	120	120		24
Corporation of City of Port Alberni	Port Alberni	Oil	1-3	60	2,300	110/220	110	28	560
B.C. Pulp & Paper Co., Ltd.	Port Alice	Steam	1-3	60	2,200	2,200/440	110		4
Royston Light & Power Co., Ltd	Royston	Purchased	1	25	13,200	110	110	2	34
B.C. Cement Company, Ltd.	Victoria—								
(serving)	Bamberton	Purchased	1	60			110		30
	Tod Inlet	Purchased	1	60			110		
Trustees of Will of J. D. Pemberton	Victoria	Purchased	1	60			110		11
Vancouver Island Pr. Co., Ltd	Victoria—								
(serving)	Brentwood Pt.	Steam	3	60	2,300	60,000			
	Jordon River Pt.	Water	3	60	2,200	60,000			
Victoria Electric Company	Victoria	Purchased	1				110		24
B.C. Electric Ry. Co., Ltd	Victoria	Water	1-3	60	750	2,200/440/220	110	468	18,563

APPENDIX H—Concluded

LIST of Electric Light and Power Companies Registered under the Provisions of the Electricity Inspection Act, during the Fiscal Year ended March 31, 1929

District and Company	Address	Type of Prime Mover	Phases of System	Frequency of System	Generator Voltage	Service Voltages		Number of Meters	
						Power	Lighting	Power	Lighting
Victoria—Concluded									
(serving)	Victoria							468	13,014
	Jordon River								5
(serving)	Colwood & Langford								202
	Esquimalt								958
	Saanich								2,589
	Oak Bay								1,795
J. A. Sayward	Victoria	Purchased	1	60			110		10
Total number of meters in District of Victoria								716	25,190

SUMMARY

Total Number of Meters, by Provinces, in Use in Canada March 31, 1929

—	Power	Light
Prince Edward Island	227	4,229
Nova Scotia	1,775	43,640
New Brunswick	1,085	35,976
Quebec	10,952	385,869
Ontario	16,533	624,447
Manitoba	3,458	109,209
Saskatchewan	3,944	52,891
Alberta	2,750	65,500
British Columbia	4,623	132,724
Totals	45,387	1,454,485

DEPARTMENT OF TRADE AND COMMERCE
OTTAWA, CANADA

MINISTER
HON. JAMES MALCOLM

DEPUTY MINISTER
F. C. T. O'HARA

ANNUAL REPORT

OF THE

Board of Grain Commissioners for Canada

FOR THE CROP YEAR ENDED AUGUST 31,

1929

OTTAWA
F. A. ACLAND
PRINTER TO THE KING'S MOST EXCELLENT MAJESTY
1930

BOARD OF GRAIN COMMISSIONERS FOR CANADA

WINNIPEG, MAN., January, 1930.

The Hon. JAMES MALCOLM, M.P.,
Minister of Trade and Commerce,
Ottawa, Canada,

SIR,—We have the honour to submit the following report as required by section 15, chapter 33, 15-16 George V, "An Act respecting Grain."

Your obedient servants,

E. B. RAMSAY,
Chief Commissioner.

D. A. MACGIBBON,
Grain Commissioner.

C. M. HAMILTON,
Grain Commissioner.

F. J. RATHBONE,
Secretary.

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CHAPTER I

STANDARDS, SURVEY AND APPEAL BOARDS

PART I.—THE GRAIN STANDARDS BOARDS

1. *Western.*—E. B. Ramsay, Chairman, Board of Grain Commissioners; D. A. MacGibbon, Commissioner; C. M. Hamilton, Commissioner; Geo. Serls, Chairman, Board of Grain Appeal, Winnipeg; Geo. Hill, Chairman, Board of Grain Appeal, Calgary; C. R. Manahan, Chairman, Board of Grain Appeal, Edmonton; J. D. Fraser, Chief Grain Inspector; Dr. F. J. Birchard, Chief Chemist, Board of Grain Commissioners; L. H. Newman, Dominion Cerealist, Department of Agriculture; Herbert Sellers, Winnipeg; W. H. Fairfield, Lethbridge, Alta.; George Bennett, Manville, Alta.; William McLeod, West Calgary, Alta.; W. H. Boyle, Edmonton, Alta.; Dean W. J. Rutherford, Saskatoon, Sask.; A. E. Wilson, Indian Head, Sask.; J. Wellbelove, Eston, Sask.; J. D. Read, Regina, Sask.; J. H. Robson, Leney, Sask.; Prof. T. J. Harrison, Winnipeg, Man.; R. M. Mahoney, Winnipeg, Man.; P. V. Wright, Winnipeg, Man.; K. Campbell, Vancouver, B.C.

2. *Eastern.*—Toronto: H. H. Goode, F. W. Hay, A. O. Hogg, R. I. Braden, H. L. Rice, C. B. Watts, E. D. Sullivan, C. W. Band, Murray Brown, T. D. Duncombe, J. S. Jeffrey, W. H. McCarthy, F. D. Tolchard, Secretary.

Montreal: H. D. Dwyer, N. Wight, A. G. Burton, A. A. Bowen, W. MacDonald, H. C. Beatty, Secretary.

GRAIN STANDARDS BOARDS

WINNIPEG, MAN.

COPY OF THE MINUTES OF THE MEETING OF THE WESTERN GRAIN STANDARDS BOARD HELD AT WINNIPEG, MAN., ON JULY 24 AND 25, 1929

Present: Messrs. K. Campbell, Chairman; Jas. Robinson; M. Snow; J. Cuddy, Assistant to J. D. Fraser, Chief Grain Inspector; F. Symes, substituting for Geo. Serls, Chairman of the Board of Grain Appeals; Geo. Hill, Chairman of the Board of Grain Appeals, Calgary; C. R. Manahan, Chairman, Board of Grain Appeals, Edmonton; W. H. Fairfield, Lethbridge, Alta.; Wm. McLeod, West Calgary; H. Sellers, Winnipeg; P. V. Wright, Winnipeg; Prof. T. J. Harrison, Winnipeg; A. E. Wilson, Indian Head; Geo. Bennett, Manville; J. Wellbelove, Eston; R. M. Mahoney, Winnipeg; J. D. Read, Regina; W. H. Boyle, Edmonton; T. R. Aitken, substituting for Dr. F. J. Birchard.

Mr. M. Snow, Grain Commissioner, called the meeting to order and requested that a chairman be elected, and on motion Mr. K. Campbell was elected as such, and took the chair.

The notice calling the meeting defined the object to be as follows:—

"Please be advised that, under the provisions of section 84 of the Canada Grain Act,, as amended during the last session of Parliament, the composite standard sample equal to seventy-five per cent (75%) of the average quality of the grade at the primary inspection point, and twenty-five per cent (25%) of the minimum quality of such grade at the said primary inspection point shall be established by the Standards Board prior to

August 1, 1929. It has therefore been decided to hold a meeting of the Standards Board for the purpose of establishing the above standard, on Wednesday, July 24, at 10 a.m. in the office of the Chief Grain Inspector, Grain Exchange Building, Winnipeg. Will you kindly endeavour to be present at this meeting."

Mr. Aitken (Assistant Chemist) in the absence of Dr. Birchard, Chemist to the board, then exhibited samples of bread baked from flour produced from samples of the different grades of grain as established by the Standards Board in October, 1928, and also bread from samples of wheat as prepared for submission to this meeting, these samples being composed of seventy-five per cent (75%) of the average quality of the grade, and twenty-five per cent (25%) of the minimum quality of such grade at the primary inspection point, and to be used after August 1, as a basis for grading all outturn samples, until such time as the outturn standard samples are established for the 1929-30 crop year.

A general discussion followed regarding the character of, and the method to be pursued in selecting the necessary composite samples, and an exchange of views took place prior to adjourning to again meet at 2 p.m. in the Grain Inspection Room where samples were in readiness for review and action thereon.

Two p.m. Samples of wheat Nos. 1, 2, 3, 4, 5 and 6 as prepared by the Chief Grain Inspector being in each case 75 per cent of the average inspection of wheat at Winnipeg and 25 per cent of the minimum average. The samples Nos. 1, 3, 4, 5, 6, were, severally, on motion approved and confirmed, the sample of No. 2 as amended being held for a new grinding and baking test, the result to be submitted to-morrow at an adjourned meeting to be held at 3 p.m.

July 25, 1929.

The meeting reassembled at 3 p.m. and on motion a sample of No. 2 (composite) wheat was approved and confirmed after the chemist had reported the grinding and baking test of same. The meeting then adjourned.

(Sgd.) C. N. BELL,
Secretary.

WINNIPEG, MAN.

COPY OF THE MINUTES OF THE MEETING OF THE WESTERN GRAIN STANDARDS BOARD, HELD IN WINNIPEG, MAN., ON SEPTEMBER 24, 25, 26, AND 27, 1929

The members of the Board assembled at 11 a.m.

Present.—Messrs. K. Campbell (Chairman); E. B. Ramsay (Board of Grain Commissioners); D. A. MacGibbon (Board of Grain Commissioners); C. M. Hamilton (Board of Grain Commissioners); Geo. Serls (Chairman, Board of Grain Appeal, Winnipeg); Geo. Hill (Chairman, Board of Grain Appeal, Calgary); C. R. Manahan (Chairman, Board of Grain Appeal, Edmonton); J. D. Fraser (Chief Grain Inspector); Dr. F. J. Birchard (Chief Chemist); L. H. Newman (Dominion Cerealist); H. Sellers; W. H. Fairfield (at sessions of 24th and 25th); Geo. Bennett, Wm. McLeod, W. H. Boyle, Dean W. J. Rutherford, A. E. Wilson, J. Wellbelove, J. D. Read, J. H. Robson, P. T. Wright, R. C. Steele (Substitute for R. M. Mahoney), Prof. T. J. Harrison (at sessions of September 26 and 27 only).

Dr. Birchard exhibited result of baking tests of average samples of wheat standards Nos. 1 Hard, 1, 2, and 3 Northern, and read statements of the chemical and baking tests of said average standard samples. A general discussion followed and Dr. Birchard and Chief Inspector Fraser afforded verbal information as requested.

The chairman, on behalf of the meeting extended congratulations to Messrs. Ramsay, MacGibbon, and Hamilton on their appointment as the Board of Grain Commissioners, and Mr. Ramsay briefly responded.

Chief Inspector Fraser read a statement giving statistics of the grading of grain of this crop.

By request, Mr. L. H. Newman gave an address on the information gained by him on a visit to Europe in connection with the more recent types of wheat raised in Western Canada.

The meeting then adjourned to 2 p.m.

At 2 p.m. the board assembled in the inspection rooms and viewed the samples of grain of the 1929 crop as prepared by the Chief Grain Inspector, whereon the standards for the following grades were approved by unanimous vote of all present.

No. 1 Hard Wheat.
Nos. 1, 2 and 3 Northern Wheat.
Nos. 1, 2 and 3 C.W. Amber Durum Wheat.
Nos. 1, 2 and 3 C.W. Rye.
No. 2 Six-Row Barley.
No. 3 Extra Six-Row Barley.
No. 2 Trebi Barley.
No. 3 Extra Trebi Barley.

The meeting then adjourned until 10 a.m. September 25, 1929.

September 25.

The board assembled at 10 a.m. and selected the standards for the following grains:—

No. 1 Hard Wheat-Composite Standards Outturn.
No. 1, 2 and 3 Northern Composite Standards Outturn.

The board then adjourned to 2 p.m. to-day.

The board assembled at 2 p.m. and selected standard samples of the following grain:—

Nos. 3, 4 5, and 6 C.W. Barley.
No. 3 Extra Two-Row Barley.
No. 2 C.W. Oats.
No. 3 C.W. Oats.

The Board then adjourned to 2 pm. to-morrow to enable Dr. Birchard to make some further chemical and baking tests.

September 26, 1929.

The board assembled at 2 p.m. Mr. Ramsay brought up the mater of the different characteristics of Three Northern Wheat of the crops of 1928 and 1929.

On motion it was decided to reopen the composite wheat standards to endeavour to include in them some wheat carrying last year's frost characteristics. Dr. Birchard then submitted samples of bread baked from the product of the standard samples of wheat, and the composite samples, in both cases the standard samples being those selected by the board during this meeting, the bread being accompanied by a statement of the chemical tests made. Also Dr. Birchard submitted the result of his tests of the composite samples as established in July last.

The meeting then adjourned for an hour to enable the Chief Inspector to submit for consideration by the board, other samples being prepared by him.

On reassembling, the board inspected the other samples submitted by the Chief Inspector, following which, on motion the sample composite No. 3 Northern wheat as selected on the 25th instant was withdrawn and cancelled and the sample composite No. 3 Northern as now submitted was adopted and approved as the standard for No. 3 Northern Wheat, subject to the report of the Chief Chemist.

After viewing some other samples for No. 2 Northern Wheat with the view of considering possible proposals to amend the sample of No. 2 Northern Wheat as selected on the 25th instant, the meeting adjourned to 10 a.m. to-morrow, September 27, 1929.

September 27, 1929.

The meeting resumed at 10 a.m. and viewed a trial sample for No. 2 Northern Wheat to possibly replace the sample of this standard as chosen on the afternoon of September 24, but without taking action adjourned to 2 p.m.

Meeting resumed business at 2 p.m., and on motion the standard samples for

No. 1 Hard Wheat,

Nos. 1, 2 and 3 Northern Wheat,

with all other standard samples of grain selected at the present meetings of this board, were approved and confirmed.

In the matter of grain where no samples from which to select standards are at present available, the board, on motion, referred the situation to the Board of Grain Commissioners for such decision and action as they consider necessary.

On motion the thanks of the board were tendered to the Chief Grain Inspector and the Chairman of the Winnipeg Board of Grain Appeal for the valuable assistance they had rendered to the board.

The meeting then adjourned subject to the call of the Board of Grain Commissioners.

(Sgd.) C. N. BELL,
Secretary.

TORONTO, ONT.

COPY OF THE MINUTES OF THE MEETING OF THE EASTERN GRAIN STANDARDS BOARD, HELD ON OCTOBER 16, 1928

Present: Messrs. R. I. Braiden, H. H. Goode, S. Hisey, J. S. Jeffrey, W. H. McCarthy, H. L. Rice and C. B. Watts; also Mr. G. H. Hogg, representing Mr. A. O. Hogg.

Chairman.—On motion of Mr. S. Hisey, seconded by Mr. H. H. Goode, Mr. H. L. Rice was appointed chairman of the meeting.

Minutes.—The minutes of the meeting of the Grain Standards Board, held November 1, 1927, were read and confirmed.

Commercial Grades.—Samples of wheat collected from various parts of the province were examined, with the view to setting the Commercial Grades for the season 1928-29.

Moved by Mr. S. Hisey, seconded by Mr. R. I. Braiden, that the definition of No. 1 Commercial Wheat be the same as for the season of 1927-28, namely, No. 1 Commercial Wheat shall be either red, white or mixed winter or spring wheat, reasonably clean, shall weigh not less than 56 pounds to the bushel, shall allow a maximum of 10 per cent sprouted grain and shall not contain a greater percentage of smut than the standard sample.

An amendment was moved by Mr. C. B. Watts, seconded by Mr. J. S. Jeffrey, resolved that No. 1 Commercial Wheat shall be either red, white or mixed winter or spring wheat, reasonably clean, shall weigh not less than 57 pounds to the bushel, shall allow a maximum of 7 per cent sprouted grain, and shall not contain a greater percentage of smut than the standard sample.—Carried. (Vote—4 to 2.)

Moved by Mr. C. B. Watts, seconded by Mr. W. H. McCarthy, resolved that No. 2 Commercial Wheat shall be either red, white or mixed winter or spring wheat, reasonably clean, shall weigh not less than 56 pounds to the bushel, shall allow a maximum of 15 per cent sprouted grain, and shall not contain a greater percentage of smut than the standard sample.—Carried.

The grain inspectors were requested to prepare a sample of No. 2 Commercial Wheat, in accordance with the foregoing resolution, and the Grain Standards Board adjourned until 3 p.m., when the meeting would be reconvened to inspect the sample.

The board reconvened at 3 p.m. with the following members present: Messrs. J. S. Jeffrey, H. L. Rice and C. B. Watts.

The samples of No. 1 and No. 2 Commercial Wheat as prepared by the grain inspectors were examined.

Moved by Mr. J. S. Jeffrey, seconded by Mr. C. B. Watts, resolved that the sample as prepared by the grain inspectors and submitted to the Grain Standards Board as No. 1 Commercial Wheat in accordance with the resolution adopted by the Grain Standards Board defining No. 1 Commercial Wheat for the season 1928-29 be accepted as the standard for No. 1 Commercial Wheat.—Carried.

Moved by Mr. J. S. Jeffrey, seconded by Mr. C. B. Watts, resolved that the sample as prepared by the grain inspectors and submitted to the Grain Standards Board as No. 2 Commercial Wheat in accordance with the resolution adopted by the Grain Standards Board defining No. 2 Commercial Wheat for the season 1928-29 be accepted as the standard for No. 2 Commercial Wheat.—Carried.

The meeting then adjourned.

MONTREAL, P.Q.

COPY OF THE MINUTES OF THE EASTERN GRAIN STANDARDS BOARD HELD SEPTEMBER 25, 1928

Present: Norman Wight, Chairman; A. Geo. Burton, F. A. Heywood, Wm. McDonald and A. A. Bowen.

It was decided to permit three-eighths of one per cent Ergot in No. 2 Rye.

COPY OF THE MINUTES OF THE EASTERN GRAIN STANDARDS BOARD HELD OCTOBER 8, 1929

Present: N. Wight, Chairman; H. D. Dwyer, F. A. Heywood, Wm. McDonald and A. A. Bowen.

The board fixed the standards for the following grades of United States grain, samples of which were deposited with the inspector and the secretary:—

No. 2 Rye.
No. 2 Amber Durum Wheat.
No. 2 Red Durum Wheat.
No. 2 Hard Winter Wheat.
No. 2 Mixed Durum Wheat.

COPY OF THE MINUTES OF THE EASTERN GRAIN STANDARDS BOARD HELD JANUARY 31, 1929

Present: N. Wight, Chairman; H. D. Dwyer, Wm. McDonald.

The board fixed the standards for the following grades of United States grain, samples of which were deposited with the inspector and the secretary:—

No. 2 Yellow Corn.
No. 3 Yellow Corn.
No. 2 Mixed Corn.
No. 2 Export Barley.

The meeting was thereafter adjourned.

PART II—GRAIN SURVEY BOARDS

1. *Toronto.*—D. Plewes, D. O. Ellis, A. O. Hogg, H. H. Goode, D. A. Campbell, E. D. Sullivan, C. B. Watts, R. I. Braiden, C. W. Band, Murray Brown, W. H. McCarthy; F. D. Tolchard, secretary.

2. *Montreal.*—C. B. Esdaile, A. G. Burton, Alfred Chaplin, T. A. Climo, J. M. Vittie, Robert Hume; H. C. Beatty, secretary.

REPORTS OF THE SURVEY BOARDS FOR THE YEAR ENDED AUGUST 31, 1929

—	Number of Surveys Held	Number of Surveys Raised	Number of Surveys Lowered	Number of Surveys Sustained
Montreal	5	0	0	5
Toronto	3	0	0	3

PART III—BOARDS OF GRAIN APPEAL

1. *Winnipeg.*—Geo. Serls, Chairman; R. C. Steele, P. V. Wright, Grant Hammond, Alfred F. Moore, Geo. J. Wells, Jas. McMahon, S. C. Swanton, Walter Duncan; C. N. Bell, secretary.

2. *Calgary.*—Geo. Hill, Chairman; W. McLeod, S. J. Ewing, Arthur Pierson, J. A. Harris, E. J. Munson, C. W. Roenisch, D. L. McLean, Willard W. Cumming; D. O. McHugh, secretary.

3. *Edmonton.*—C. R. Manahan, Chairman; W. H. Boyle, L. T. Ingram, F. J. Wolfe, Clyde C. Gillies, R. H. Settle, A. Fraser, J. A. Kyle, J. W. Allen; John Blue, secretary.

REPORTS OF THE APPEAL BOARDS FOR THE YEAR ENDED AUGUST 31, 1929

—	Number of Appeals Held	Number of Appeals allowed		Number of Appeals Failed
		Raised	Lowered	
Winnipeg	5,634	446	22	5,166
Calgary	3,065	575	59	2,431
Edmonton	2,821	328	9	2,484

CHAPTER II

REPORT OF MR. J. D. FRASER, CHIEF GRAIN INSPECTOR

WINNIPEG, MAN., October 10, 1929.

The Secretary,
Board of Grain Commissioners,
Fort William, Ont.

DEAR SIR,—Herewith my annual report for the crop year August 1, 1928 to July 31, 1929.

WESTERN INSPECTION DIVISION

The crop of the year 1928 was the largest ever produced in the Western Inspection Division, exceeding the crop of 1923, the largest previous crop, by 56,803 cars.

The weather during the growing period was almost ideal up to the last week in August, and prospects appeared very favourable for a large percentage of high grade wheat. During the last week of the month frost was experienced over large areas in the division, and much grain, some of it two to three weeks from being ripe, was so severly affected as to materially lower the grade. Uneven germination in some districts, the results of which was a mixture of immature and green kernels also lowered the grades. Generally favourable weather conditions during September enabled harvesting and threshing and this was practically completed by the end of the month.

Damage from frost and uneven germination accounts for the very high percentage of lower grades, a percentage very much higher than anything experienced in the division in the past years.

The total inspections for the crop year of 1928-29 in the Western Division amount to 413,508 cars, as against 353,253 cars for the previous year.

The total inspections from August 1, 1928, to July 31, 1929, are made up as follows:—

	Cars		Cars
Wheat	345,797	Mixed grain	1,821
Oats	22,719	Flax seed	2,546
Barley	33,783	Buckwheat	1
Rye	6,486	Screenings	355
		Total	413,508

The grades of wheat show as follows:—

	Cars	Percentage
No. 1 Hard, 1 northern, 2 northern, and 3 northern	113,459	32·82
No. 4, No. 5, No. 6 and Feed	203,280	58·79
No Grade Tough or Damp	5,306	1·53
Other Grades	2,370	0·68
Amber Durum (all grades)	19,213	5·55
White Spring (all grades)	1,423	0·41
Kota Wheat (all grades)	25	0·01
Winter Wheat (all grades)	635	0·18
Red Durum (all grades)	86	0·03
	345,797	100·00

The grades of oats show as follows:—

	Cars	Percentage
Number 1, 2 and 3 C.W	2,936	12·92
Extra 1 Feed, 1 Feed and 2 Feed	18,421	81·08
No Grade Tough or Damp	237	1·05
Other Grades	1,125	4·95
	22,719	100·00

The grades of barley show as follows:—

	Cars	Percentage
No. 3 Extra, No. 3 and No. 4	14,193	42·01
Feed and Rejected	16,050	47·51
No Grade Tough or Damp	1,482	4·39
Other grades	2,058	6·09
	33,783	100·00

The grades of rye show as follows:—

	Cars	Percentage
No. 1, 2 and 3 C.W	3,719	57·34
No Grade Tough or Damp	327	5·04
Other grades	2,440	37·62
	6,486	100·00

The grades of flax seed show as follows:—

	Cars	Percentage
No. 1 N.W. and No. 2 C.W	2,317	91·03
No. 3 C.W	173	6·80
No Grade Tough or Damp	37	1·46
Other grades	19	0·71
	2,546	100·00

The number of cars of grain inspected at the various inspection points in the Western Division were as follows:—

	Cars		Cars
Winnipeg	283,521	Medicine Hat	3,375
Calgary	45,259	Superior	1,065
Edmonton	36,452	Vancouver	1,606
Moose Jaw	36,113	Prince Rupert	40
Saskatoon	6,077		
		Total	413,508

A re-inspection was called on 75,049 cars, or 18·14 per cent of the total inspections with results as follows:—

	Cars	Percentage	Percentage of Total Inspections
Left as graded	60,824	81·05	14·71
Grades raised	8,658	11·54	2·09
Grades lowered	813	1·08	0·20
Dockage raised	1,833	2·44	0·44
Dockage lowered	2,921	3·89	0·70
	75,049	100·00	18·14

An appeal was called at Winnipeg on 5,620 cars with results as follows:—

	Cars	Percentage
Left as graded originally	5,283	94·00
Grades raised	313	5·57
Grades lowered	24	0·43
Dockage raised	0	0·00
Dockage lowered	0	0·00
	5,620	100·00

An appeal was called at Calgary on 3,080 cars, with results as follows:—

	Cars	Percentage
Left as graded originally	2,412	78·31
Grades raised	516	16·75
Grades lowered	30	0·98
Dockage raised	32	1·04
Dockage lowered	90	2·92
	3,080	100·00

An appeal was called at Edmonton on 2,815 cars, with results as follows:—

	Cars	Percentage
Left as graded	2,275	80·82
Grades raised	311	11·05
Grades lowered	26	0·92
Dockage raised	55	1·95
Dockage lowered	148	5·26
	2,815	100·00

RECAPITULATION OF APPEALS

	Cars	Percentage Left and Changed	Percentage of Total Cars Inspected
Total cars appealed	11,515	.....	2·784
Left as graded	9,970	.....	2·411
Changed on appeal	.....	.....	·373
Grades raised	1,140	·275	.....
Grades lowered	80	0·019	.....
Dockage raised	87	0·021	.....
Dockage lowered	238	0·058	0·373

Shipments of grain from Fort William, Port Arthur, Vancouver, Prince Rupert, and Victoria, during the year August 1, 1928 to July 31, 1929.

—	Fort William and Port Arthur	Vancouver	Prince Rupert	Victoria	Totals
	bush.	bush.	bush.	bush.	
Wheat	297,757,613	96,345,566	2,470,510	141,258	396,714,947
Oats	24,375,131	842,740	1,779	0	25,219,650
Barley	41,809,134	501,435	0	46,820	42,357,389
Rye	6,937,172	31,344	0	0	6,968,516
Flax seed	3,012,747	21	0	0	3,012,768
Mixed grains	513,366	0	0	0	513,366
	374,405,163	97,721,106	2,472,289	188,078	474,786,636

EASTERN INSPECTION DIVISION

RECEIPTS AND EXPENDITURES YEAR ENDING JULY 31, 1929

——	Montreal	Toronto	Totals
	$ cts.	$ cts.	$ cts.
Receipts			
Inspection fees	65,175 23	606 00	65,781 23
Miscellaneous	17,020 75	359 70	17,380 45
	82,195 98	965 70	83,161 68
Expenditures			
Salaries	31,403 90	7,268 00	38,671 90
Miscellaneous	6,959 74	1,124 74	8,084 48
	38,363 64	8,392 74	46,756 38

	Receipts	Expenditures		
Montreal	$ 82,195 98	$ 38,363 64	Surplus	$43,832 34
Toronto	965 70	8,392 74	Deficit	7,427 04
	$ 83,161 68	46,756,38	Surplus	36,405 30
Expenses Eastern Standards Board		$ 330 39		
Expenses of audit		150 00		
				480 39
Net surplus				$35,924 91

Yours truly,

(Sgd.) JAS. D. FRASER,
Chief Inspector.

CHAPTER III

REPORT OF MR. W. T. TODD, DEPUTY REGISTRAR

WINNIPEG, MAN., November 27, 1929.

F. J. RATHBONE, Esq.,
Secretary Board of Grain Commissioners,
Fort William, Ont.

DEAR SIR,—I herewith submit a statement showing the work of the Registration Department for the crop year ended August 31, 1929:—

Total Bushels Registered		Total Bushels Registered for Cancellation	
Wheat	316,863,335·10	Wheat	284,017,488·10
Oats	31,104,904·19	Oats	23,882,260·11
Barley	40,352,026·10	Barley	37,849,149·28
Flax	2,689,016·01	Flax	2,468,809·55
Rye	8,440,435·16	Rye	6,645,518·10
Mixed grain	4,492,561·10	Mixed grain	1,556,724·20
Corn	206,830·32	Corn	131,431·38

Yours truly,

(Sgd.) W. T. TODD,
Deputy Registrar.

CHAPTER IV

REPORT OF MR. S. M. CAPON, ACTING CHIEF WEIGHMASTER

The Secretary,
Board of Grain Commissioners,
Fort William, Ontario.

DEAR SIR,—Herewith is my annual report for the crop year ending July 31, 1929.

ELEVATORS

There have been thirty-three (33) elevators in operation at Fort William and Port Arthur, four (4) public terminals and twenty-nine (29) private terminals, with an approximate storage capacity of eighty-seven million (87,000,000) bushels.

At the Pacific coast there were nineteen (19) elevators in operation, two (2) public terminals and seventeen (17) private terminals. The construction of five (5) new elevators was completed, three at Vancouver, one at Victoria and one at New Westminster during the crop year.

At interior points weighing services were supplied at forty-six (46) licensed elevators, making a total of ninety-eight (98) elevators in the Western Weighing Division, where this department had complete control and supervision of all the weighing of grain.

The handling and weighing equipment in the above elevators has been under constant supervision and the upkeep of the different plants has been satisfactory.

SCALES

The thirty-three (33) elevators operating at Port Arthur and Fort William are equipped with two hundred and three (203) scales of varying capacity up to seventy-five (75) tons, over which approximately eight hundred and twenty-six million, two hundred and ten thousand, six hundred and ten (826,210,610) bushels of grain and three hundred and seventy-eight thousand, four hundred and eighty-four (378,484) tons of screenings have been officially weighed during the crop year, and with the services of a scale mechanic employed by the various elevator companies, these scales have been kept in good repair.

At the Government interior elevators at Moose Jaw, Saskatoon, Calgary, Edmonton and at the terminal elevators at Vancouver, Prince Rupert, Victoria and New Westminster, loading to deep sea berths, there are ninety-four (94) scales, making a total of two hundred and ninety-seven (297) scales inspected by the Chief Weighmaster under his authority as elevator scale inspector, which have been inspected twice during the year.

The semi-annual test was made on behalf of the board to ensure continued accuracy of the scales, for which there was no charge and the annual inspection was carried out as provided for by the Weights and Measures Act by me, owing to the retirement of Mr. J. G. White, Chief Weighmaster and Elevator Scale

Inspector, the board securing the necessary authority from the department, authorizing me to act as elevator scale inspector. Certificates of verification were issued and fees collected and remitted to the following district inspectors:

J. B. Attridge, Winnipeg	$ 2,307 70
E. B. Lorrimer, Regina	79 60
W. Wallace, Saskatoon	77 60
A. E. H. Cable, Calgary	75 30
J. M. McLeod, Edmonton	68 80
A. H. Dutton, Prince Rupert	68 85
A. H. Dutton, Vancouver	582 60
	$ 3,260 45

(See detailed statement attached.)

Eastern Division—Scale Inspection

The scale inspection in the Eastern Division was carried out by Mr. A. A. Bowen, Inspector, Montreal, at the elevators in Goderich, Owen Sound, Port McNicoll, Depot Harbour, Midland, Tiffin, Port Colborne, Sarnia, Peterboro, Montreal, Toronto, Quebec, St. John and Halifax.

Weighing Staff

At the commencement of the crop year August 1, 1928, there were in the Western Weighing Division 247 employees, staffs being maintained at the following points:—

Ontario.—Port Arthur, Kenora, Fort William, and Keewatin.

Manitoba.—Winnipeg and Portage la Prairie.

Saskatchewan.—Saskatoon, Moose Jaw and Factoria.

Alberta.—Medicine Hat, Edmonton and Calgary.

British Columbia.—Vancouver, Prince Rupert and Victoria.

During the crop year, the following reductions in the staff took place:—

Resigned	7
Deceased	2
Laid off	35
Dismissed	2
Superannuated	1

while the additions totalled seventy-five (75) representing new appointments, re-engagements and the filling of the above vacancies—the staff at the close of the crop, year July 31, 1929, totalling two hundred and seventy-five (275) employees.

Leak and Seal Inspection

Following is a report of the work of the Leak and Seal Inspectors in the railway yards at Winnipeg and Transcona for the year ending July 31, 1929.

—	Cars inspected	Cars leaking and defective seals	Per cent
Canadian Pacific Railway	178,268	47,237	26·4
Canadian National Railways	137,939	26,328	19·1
Total	316,207	73,565	Average 23·2

Summary

Cars inspected	316,207
Cars leaking and defective seals	73,565
Condition reports completed for grain trade	36,022

The staff engaged in this work are rendering a very valuable service to shippers and the trade in supplying them with condition reports that assist them in securing adjustments for loss or leakage and, as the getting out of these condition reports involves considerable amount of clerical work, a charge of twenty-five (25c.) cents is collected from shippers requiring this service.

Revenue from this source amounted to $8,192.50.

Weighing

Following are the quantities of grains which were weighed into and out of the elevators at Fort William, Port Arthur and Western points during the crop year ending July 31, 1929.

RECEIPTS AND SHIPMENTS

—	Cars	Gross bushels
All grains receipts	301,782	437,165,397
Screenings—47,611 tons	1,558½	
Shipments—Rail and transfer	5,623	24,940,386
Shipments—Lake, 1,497 cargoes	.....	364,104,827
Screenings, 330,873 tons.		
Total Fort William and Port Arthur	308,963½	826,210,610
At Kenora	2,654	3,849,401
At Keewatin	6,760	10,393,051
At Winnipeg	28,268	40,174,293
At Portage la Prairie	2,226	2,893,252
At Moose Jaw	10,944	15,631,845
At Saskatoon	10,434	14,353,401
At Medicine Hat	4,307	6,029,800
At Calgary	16,481	23,482,859
At Edmonton	5,323	7,408,978
At Prince Rupert—Receipts	1,903	2,544,511
At Prince Rupert—Shipments	.....	2,472,288
Other shipments	.....	1,778
At Vancouver—Receipts	72,584	101,627,382
At Vancouver—Shipments, 609 cargoes	.....	95,394,650
At Vancouver—Rail shipments	2,188	2,029,242
At Vancouver—Screenings. 29,243 tons.		
Totals	473,035½	1,154,497,341

Report of Cars arriving at Destination with Missing or Defective Seals —Crop Year Ending July 31, 1929

Month	Canadian Pacific Railway	Canadian National Railways	Total
1928—August	66	88	154
September	1,243	743	1,986
October	2,446	1,229	3,675
November	1,933	973	2,906
December	1,223	642	1,865
1929—January	208	142	350
February	69	36	105
March	127	73	200
April	163	120	283
May	253	159	412
June	212	152	364
July	235	141	376
	8,178	4,498	12,676

Summary

Via Canadian Pacific Railway	8,178
Via Canadian National Railway	4,498
	12,676

Report of Cars Leaking on Arrival at Destination in the Western Weighing Division—Crop Year Ending July 31, 1929

CANADIAN PACIFIC RAILWAY

Month	Door post	Grain door	End	Draw bar	Side	King bolt	Floor	Total
1928								
August	94	90	225	35	368	5	39	856
September	283	293	1,728	307	1,721	20	94	4,446
October	653	640	2,790	416	3,120	23	117	7,759
November	619	737	2,704	404	2,872	11	92	7,439
December	410	414	1,598	208	2,010	11	69	4,720
1929								
January	100	186	505	64	957	5	20	1,837
February	90	125	240	58	494	4	17	1,028
March	200	171	492	113	854	7	28	1,865
April	189	156	718	87	816	1	30	1,997
May	193	160	860	67	900	4	29	2,213
June	300	144	955	103	832	4	15	2,353
July	319	132	1,145	90	909	5	17	2,617
Totals	3,450	3,248	13,960	1,952	15,853	100	567	39,130

CANADIAN NATIONAL RAILWAYS

Month	Door Post	Grain door	End	Draw bar	Side	King bolt	Floor	Total
1928								
August	54	21	122	13	125	2	6	343
September	336	259	886	102	464	1	35	2,083
October	467	516	1,642	179	811	4	74	3,693
November	385	512	1,518	236	922	86	60	3,719
December	273	344	1,025	142	547	62	24	2,417
1929								
January	103	158	284	35	194	6	9	789
February	101	118	153	40	263	19	9	703
March	118	133	174	41	384	10	14	874
April	176	102	323	49	520	1	11	1,182
May	307	146	747	71	894	6	9	2,180
June	331	183	837	114	820	1	16	2,302
July	342	264	757	73	737	.....	18	2,191
Totals	2,993	2,756	8,468	1,095	6,681	198	285	22,476

Summary

Canadian Pacific Railway	39,130
Canadian National Railway	22,476
Total	61,606

Cars transferred on account of bad order, 516.

Shortages—Cars

Considering that over four hundred and seventy-three thousand cars have been officially weighed in the Western Weighing Division during the crop year, apart from cars found leaking there has been few complaints for alleged shortages. Complaints received have been investigated and where it has been proven

that mishaps have occurred at the unloading elevators, the elevator companies have been asked to issue additional warehouse receipts to cover these claims. Very few complaints come to us from cars that are loaded and unloaded under the supervision of our weighmen. If more shippers would use the standard form of loading cars, if a difference was discovered between the loading weight and the weight received into the scale at the unloading elevator, an investigation could be made while the grain is still in the scale hopper and the car at the unloading pit. It is evident that such an investigation is of more value than one made, such as is very often the case, months later.

Shortages—Vessels

For the crop year ending July 31, 1929, the average of reported outturns of shipments ex Fort William and Port Arthur were not as satisfactory as the previous year. On cargoes unloaded at Canadian ports the average reported shortage was: Wheat 23·62 pounds per 1,000 bushels, and other grain 41·12 pounds per 1,000 bushels. The average reported shortage on cargoes unloaded at American ports was: Wheat 5·01 pounds per 1,000 bushels, other grain 53·29 pounds per 1,000 bushels.

The average for Canadian and American ports was: Wheat 13·67 pounds for 1,000 bushels, and other grain 45·76 pounds per 1,000 bushels.

Outturns received from some elevators at both Canadian and American ports were very good while others were most unsatisfactory. The system of weighing is uniform in the elevators at the head of the lakes and our weighmen use every precaution to maintain the accuracy of weights.

It is also noted that there is a great variation in the average outturns for the crop year of shipping companies that are engaged in the transportation of grain on the Great Lakes.

No outturn reports are received for shipments made from the Pacific coast.

Complaints of alleged shortages were received and thoroughly investigated and there was nothing discovered that would indicate that a mishap had been made at the loading elevators.

Annual Weigh-up

The annual weigh-up of the stocks in store in the ten (10) public terminal elevators operating in the Western Weighing Division was carried out according to the Act and, although the stocks were unusually heavy, was completed by August 31 and statements were prepared of the correct quantities of each grade in store and forwarded to the board.

As in previous years, a number of elevators operating in the Western Division as private terminals, were weighed up at their own request, and the usual fee of 50 cents per 1,000 bushels was charged for this service.

S. M. CAPON,
Acting Chief Weighmaster.

BOARD OF GRAIN COMMISSIONERS FOR CANADA

Report of Scales Inspected in Elevators in the Western Weighing Division Year 1928-29

Name of Elevator	Date of Construction	Storage	Number of Scales	Make	Capacity	Shipping	Receiving	Date Installed	Inspection Weights and Measures	Fees	Board Inspection No charge	Special Inspections as occasion called for
		bush.			lb.					$ cts.		
PUBLIC TERMINALS												
Fort William, Ont.—												
Grand Trunk Pacific	1910	5,750,000	10 hoppers	Gurney	120,000	5	5	1910	Annually	120 00	Semi-annually	
Port Arthur, Ont.—												
Canadian Government	1913	3,250,000	10 hoppers	Fairbanks	120,000	5	5	1913	Annually	120 00	Semi-annually	
			1 automatic	Fairbanks	180	Bag	ger	1918	Annually	2 50		
			1 platform	Fairbanks	600				Annually	1 00		
Saskatchewan Pool No. 4	1917	6,568,410	8 hoppers	Gurney	120,000	4	4	1917	Annually	96 00	Semi-annually	1 special test.
Saskatchewan Pool No. 6	1920		9 hoppers	Fairbanks	120,000	5	4	1920	Annually	180 00	Semi-annually	
Moose Jaw, Sask.—												
Government	1914	3,250,000	6 hoppers	Fairbanks	120,000	3	3	1914	Annually	72 00	Semi-annually	1 special test.
			2 automatics	Fairbanks	180	Bag	gers	1915	Annually	4 60		
			2 platforms	Gurney	1,200			1915	Annually	3 00		
Saskatoon, Sask.—												
Government	1914	3,250,000	6 hoppers	Gurney	120,000	3	3	1914	Annually	72 00	Semi-annually	
			2 automatics	Fairbanks	180	Bag	gers	1915	Annually	4 60		
			1 platform	Fairbanks	600			1915	Annually	1 00		
Calgary, Alta.—												
Government	1915	2,500,000	6 hoppers	Fairbanks	120,000	3	3	1915	Annually	72 00	Semi-annually	
			1 automatic	Fairbanks	180	Bag	ger	1915	Annually	2 30		
			1 platform	Fairbanks	600			1915	Annually	1 00		
Edmonton, Alta.—												
Government	1924	2,500,000	5 hoppers	Gurney	120,000	3	2	1924	Annually	60 00	Semi-annually	
			3 automatics	Richardson	180	Bag	gers	1925	Annually	7 80		
			1 platform	Fairbanks	500			1925	Annually	1 00		
Vancouver, B.C.—												
Pacific Terminal	1916	2,100,000	3 hoppers	Fairbanks	120,000		3	1916	Annually	36 00	Semi-annually	
			3 automatics	Richardson	10,000	3		1916	Annually	54 00	Semi-annually	
			3 automatics	Richardson	180	Bag	gers	1916	Annually	9 45		
			1 platform	Fairbanks	1,000			1922	Annually	1 00		
Annex	1923		3 hoppers	Fairbanks	72,000	3		1923	Annually	30 00	Semi-annually	
Victoria, B.C.—												
Panama Pacific	1928	1,000,000	1 hopper	Gurney	120,000		1	1928	Annually	12 00	Semi-annually	
			2 hoppers	Gurney	72,000	2		1928	Annually	20 00	Semi-annually	

Private Terminals

Fort William, Ont.—												
Northland "D"	1896	7,500,000	3 hoppers	Fairbanks	96,000	3		1896	Annually	36 00	Semi-annually	
	1908		4 hoppers	Gurney	96,000	4		1908	Annually	48 00	Semi-annually	
	1908		4 hoppers	Gurney	120,000		4	1908	Annually	48 00	Semi-annually	
	1914		5 hoppers	Gurney	60,000	5		1914	Annually	40 00	Semi-annually	
Saskatchewan Pool No. 8	1903	2,500,000	8 hoppers	Fairbanks	100,000	4	4	1903	Annually	96 00	Semi-annually	
			2 hoppers	Fairbanks	72,000	2		1903	Annually	20 00	Semi-annually	
Empire	1904	1,750,000	8 hoppers	Fairbanks	96,000	4	4	1904	Annually	96 00	Semi-annually	
Western	1907	2,850,000	3 hoppers	Fairbanks	96,000	2	1	1907	Annually	36 00	Semi-annually	
2nd Unit	1914		4 hoppers	Fairbanks	120,000	2	2	1914	Annually	48 00	Semi-annually	
3rd Unit	1923		4 hoppers	Fairbanks	120,000	2	2	1923	Annually	48 00	Semi-annually	1 special test.
Ogilvies	1908	3,000,000	2 hoppers	Fairbanks	30,000	2		1908	Annually	12 00	Semi-annually	1 special test.
	1908		4 hoppers	Gurney	120,000		4	1914	Annually	48 00	Semi-annually	
Consolidated	1909	1,750,000	3 hoppers	Fairbanks	96,000	2	1	1909	Annually	36 00	Semi-annually	
2nd Unit	1911		3 hoppers	Gurney	120,000	2	1	1911	Annually	36 00	Semi-annually	
McCabes	1912	35,000	1 hopper	Fairbanks	12,000	S. & R.		1912	Annually	3 50	Semi-annually	
Bole Grain	1912	20,000	1 hopper	Gurney	12,000	S. & R.		1912	Annually	3 50	Semi-annually	
			1 platform	B. S. & M.	1,200			1913	Annually	1 50		
			1 automatic	Richardson	180	Bag ger		1913	Annually	2 55		
Fort William "F"	1913	1,750,000	6 hoppers	Gurney	96,000	6		1913	Annually	72 00	Semi-annually	1 special test.
			3 hoppers	Gurney	120,000		3	1913	Annually	36 00	Semi-annually	
Electric	1916	1,000,000	3 hoppers	Gurney	120,000	2	1	1916	Annually	36 00	Semi-annually	
			1 hopper	Fairbanks	84,000	1		1926	Annually	12 00	Semi-annually	
		59,722,210								1,726 30		
Western Grain	1915	250,000	1 hopper	Fairbanks	30,000		1	1915	Annually	6 00	Semi-annually	
			1 hopper	Fairbanks	96,000	S. & R.		1916	Annually	12 00	Semi-annually	
National Feed	1918	85,000	1 track scale	Gurney	200,000	S. & R.		1918	Annually	20 00	Semi-annually	
			1 hopper	Gurney	30,000	1		1918	Annually	6 00	Semi-annually	
			1 automatic	Richardson	180	Bag ger		1918	Annually	2 45		
			1 platform	Champion	1,200			1918	Annually	1 50		
Ogilvie Feed Mill	1921	180,000	1 hopper	Fairbanks	84,000	S. & R.		1921	Annually	12 00	Semi-annually	
Northwestern	1922	3,000,000	3 hoppers	Gurney	120,000	1	2	1922	Annually	36 00	Semi-annually	
	1925		3 hoppers	Gurney	120,000	3		1925	Annually	36 00	Semi-annually	
Paterson's "O"	1922	2,500,000	4 hoppers	Gurney	150,000	2	2	1927	Annually	54 00	Semi-annually	
			1 hopper	Fairbanks	60,000	1		1914	Annually	8 00	Semi-annually	
Paterson's "K"	1913	50,000	1 hopper	Fairbanks	30,000	1		1913	Annually	6 00	Semi-annually	
			1 hopper	Fairbanks	42,000		1	1913	Annually	8 00	Semi-annually	
Searle	1928	3,000,000	4 hoppers	Fairbanks	150,000	2	2	1928	Annually	54 00	Semi-annually	
Port Arthur, Ont.—												
Manitoba Pool No. 2	1905	1,375,000	1 hopper	Fairbanks	42,000	1		1905	Annually	8 00	Semi-annually	
			2 hoppers	Fairbanks	120,000	1	1	1923	Annually	24 00	Semi-annually	1 special test.
Thunder Bay	1908	1,500,000	3 hoppers	Fairbanks	96 000	3		1908	Annually	36 00	Semi-annually	
			3 hoppers	Fairbanks	120,000		3	1908	Annually	36 00	Semi-annually	
National	1916	60,000	1 hopper	Fairbanks	60,000	S. & R.		1916	Annually	8 00	Semi-annually	
			1 automatic	Richardson	180	Bag ger		1918	Annually	2 70		
			1 platform	B. S. & M.	1,200			1918	Annually	1 50		
Manitoba Pool No. 1	1917	1,750,000	2 hoppers	Gurney	120,000	1	1	1917	Annually	24 00	Semi-annually	2 special tests.
			1 hopper	Gurney	96,000	1		1918	Annually	12 00	Semi-annually	
Union Terminal	1916	1,200,000	2 hoppers	Fairbanks	96,000	1	1	1916	Annually	24 00	Semi-annually	
			2 hoppers	Fairbanks	60,000	1	1	1918	Annually	16 00	Semi-annually	
Saskatchewan Pool No. 5	1918	2,100,000	4 hoppers	Gurney	120,000	2	2	1918	Annually	48 00	Semi-annually	
Eastern Terminal	1918	3,500,000	7 hoppers	Gurney	120,000	4	3	1918	Annually	84 00	Semi-annually	

BOARD OF GRAIN COMMISSIONERS FOR CANADA

Report of Scales Inspected in Elevators in the Western Weighing Division Year 1928-29

Name of Elevator	Date of Construction	Storage	Number of Scales	Make	Capacity	Shipping	Receiving	Date Installed	Inspection Weights and Measures	Fees	Board Inspection No charge	Special Inspections as occasions called for
PRIVATE TERMINALS—*Concluded*		bush.			lb.					$ cts.		
Port Arthur—Conc.												
Superior	1922	900,000	3 hoppers	Gurney	120,000	2	1	1922	Annually	36 00	Semi-annually	
Stewart	1923	2,250,000	5 hoppers	Fairbanks	120,000	3	2	1923	Annually	60 00	Semi-annually	
Bawlf	1923	2,350,000	5 hoppers	Fairbanks	120,000	3	2	1923	Annually	60 00	Semi-annually	
Reliance	1924	3,800,000	5 hoppers	Fairbanks	120,000	3	2	1924	Annually	60 00	Semi-annually	
United Grain Growers "A"	1927	5,500,000	7 hoppers	Fairbanks	150,000	4	3	1927	Annually	94 50	Semi-annually	1 special test.
Saskatchewan Pool No. 7	1928	6,900,000	11 hoppers	Gurney	150,000	6	5	1928	Annually	148 50	Semi-annually	
Vancouver, B.C.—												
Burrard	1923	1,630,000	2 hoppers	Fairbanks	120,000	.....	2	1923	Annually	24 00	Semi-annually	1 special test.
			1 hopper	Gurney	60,000	1	.....	1924	Annually	8 00	Semi-annually	
			2 hoppers	Gurney	120,000	2	.....	1927	Annually	24 00	Semi-annually	
Vancouver Terminal	1924	2,250,000	5 hoppers	Fairbanks	120,000	2	3	1924	Annually	60 00	Semi-annually	1 special test.
			1 hopper	Gurney	132,000	1	.....	1925	Annually	13 00	Semi-annually	
Alberta Pool No. 2	1924	1,650,000	4 hoppers	Gurney	150,000	1	3	1924	Annually	56 00	Semi-annually	1 special test.
			6 hoppers	Gurney	72,000	6	.....	1924	Annually	60 00	Semi-annually	
Columbia Grain	1924	150,000	2 hoppers	Fairbanks	60,000	2	.....	1924	Annually	16 00	Semi-annually	1 special test.
			1 hopper	Fairbanks	120,000	.....	1	1924	Annually	12 00	Semi-annually	
Alberta Pool No. 1	1928	5,150,000	7 hoppers	Fairbanks	120,000	4	3	1928	Annually	84 00	Semi-annually	1 special test.
Midland Pacific	1928	1,500,000	3 hoppers	Fairbanks	120,000	1	2	1928	Annually	36 00	Semi-annually	1 special test.
Prince Rupert, B.C.—												
Alberta Pool	1925	1,250,000	5 hoppers	Gurney	120,000	3	2	1925	Annually	60 00	Semi-annually	
New Westminster, B.C.												
Fraser River	1929	700,000	3 hoppers	Gurney	120,000	1	2	1929	Annually	36 00	Semi-annually	
		116,252,210								3,260 45		

CHAPTER V

"A"—REPORT OF LICENSING AND BONDING FOR THE SEASON OF 1928-29

During the licence year of 1928-1929 commencing September 1, 1928, and ending August 31, 1929, 251 firms and individuals applied for licences as required by the provisions of the Canada Grain Act.

Five thousand seven hundred and sixty-seven applications were received, an increase of 757 over the previous season. Two of the applications were withdrawn and 5,765 licences were issued.

APPLICATIONS RECEIVED AND LICENCES ISSUED

Kind of Licence	Applications		Licences issued
	Received	Withdrawn	
Track buyers	82	.....	82
Commission merchants	90	.....	90
Primary grain dealers	2	.....	2
Public terminal elevators	10	.....	10
Private elevators	80	.....	80
Public elevators	20	.....	20
Manufacturing elevators	19	1	18
Elevator space	1	.....	1
Country elevators	5,154	1	5,153
Private country elevators	309	.....	309
	5,767	2	5,765

Surety bonds amounting to $19,768,800 were executed by twelve of the approved surety companies and were deposited at this office as security covering the operations of the licensees.

At August 31, 1929, there were 5,593 elevators in the Western Inspection Division, with a total storage capacity of 310,419,790 bushels, an increase since August 31, 1928, of 737 elevators, with increased storage of 45,226,440 bushels.

ELEVATOR STORAGE CAPACITY, WESTERN INSPECTION DIVISION, AS AT AUGUST 31, 1929

Kind of Elevator	Number of elevators	Capacity bushels
Country elevators	5,483	183,297,430
Public terminal elevators	10	38,067,210
Private elevators	82	86,485,000
Manufacturing elevators	18	2,570,150
	5,593	310,419,790

Of the ten public terminal elevators four are located at the head of the lakes, with total storage capacity of 22,967,210 bushels; four at interior points, capacity 12,000,000 bushels; and two at the Pacific coast with storage capacity of 3,100,000 bushels.

PUBLIC TERMINAL AND PRIVATE ELEVATORS IN THE WESTERN INSPECTION DIVISION AS AT AUGUST 31, 1929

Location	Public terminal elevators		Private elevators	
	Number	Capacity	Number	Capacity
Fort William	1	5,750,000	15	31,055,000
Port Arthur	3	17,217,210	13	32,725,000
	4	22,967,210	28	63,780,000
Interior points	4	12,000,000	38	11,698,000
Pacific coast	2	3,100,000	16	11,007,000
Totals	10	38,067,210	82	86,485,000

In the Eastern Inspection Division, the only elevators under the jurisdiction of the board are the public elevators, of which there are twenty-seven, with a total storage capacity of 55,162,000. Fifteen of these elevators are located in Ontario, with capacity of 31,150,000 bushels; seven at Montreal and Quebec, storage 20,312,000 bushels; and five at the Atlantic coast, in the Maritime Provinces, with storage capacity of 3,700,000 bushels.

The appended statements show:—

"Licences issued during the past eighteen years."

"Comparative summary of elevators, together with storage capacities, from 1911-12 to 1928-29."

"Summary of elevators in the Western and Eastern Inspection Divisions, as at August 31, 1929."

STATEMENT SHOWING NUMBER AND KIND OF LICENCES ISSUED DURING THE SEASONS 1911-12 TO 1928-29

Kind	1928-1929	1927-1928	1926-1927	1925-1926	1924-1925	1923-1924	1922-1923	1921-1922	1920-1921	1919-1920	1918-1919	1917-1918	1916-1917	1915-1916	1914-1915	1913-1914	1912-1913	1911-1912
Country elevators and warehouses	5,153	4,540	4,314	4,236	4,074	4,054	3,828	3,668	3,704	3,146	3,322	3,577	3,257	3,013	2,636	2,552	2,267	1,972
Private country elevators	309	156	35	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Public terminal elevators	10	11	14	21	11	9	12	11	12	17	17	17	15	13	13	14	* 23	* 34
Private elevators	80	80	67	64	63	60	32	29	25	17	18	20	21	19	18	13		
Public elevators	20	18	17	17	11	10	10	13	11	16	16	18	16	18	18	20		
Manufacturing elevators	18	16	10	10	12	11	9	14	.....	.....	.....	.....	1	.....	.....	.....	.....	.....
Elevator space	1	1	3	3	2	2	2	.....	.....	.....	.....	7	7	10	7	3	19	58
Track buyers	82	84	88	95	104	109	113	132	143	131	130	156	211	195	140	137	146	123
Commission merchants	90	92	95	94	94	102	100	110	117	114	117	126	138	111	92	91	91	84
Primary grain dealers issued	2	3	3	3	3	4	6	3	2	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total number	5,765	5,001	4,646	4,543	4,374	4,361	4,112	3,980	4,014	3,441	3,620	3,921	3,666	3,379	2,924	2,830	2,546	2,271

* Licensed as terminal elevators.

COMPARATIVE SUMMARY OF ELEVATORS FOR THE PAST 18 YEARS (AS AT DECEMBER 1) EACH YEAR

Licence year	Stations	Elevators	Warehouses	Capacity
1911-12	937	2,037	31	108,649,900
1912-13	1,048	2,319	37	127,224,550
1913-14	1,217	2,607	24	154,765,000
1914-15	1,247	2,813	28	168,624,000
1915-16	1,334	3,059	19	180,988,000
1916-17	1,400	3,360	.....	193,844,000
1917-18	1,463	3,694	.....	211,591,800
1918-19	1,484	3,777	.....	221,279,964
1919-20	1,511	3,797	.....	226,256,970
1920-21	1,542	3,855	.....	231,213,620
1921-22	1,559	3,924	.....	231,633,420
1922-23	1,578	4,020	.....	238,107,420
1923-24	1,620	4,169	.....	251,194,620
1924-25	1,704	4,324	.....	269,900,620
1925-26	1,745	4,416	.....	281,746,560
1926-27	1,798	4,558	.....	284,818,200
1927-28	1,852	4,823	.....	310,832,200
1928-29	1,972	5,481	.....	358,254,790

SUMMARY OF ELEVATORS AND WAREHOUSES IN THE EASTERN AND WESTERN INSPECTION DIVISIONS, AS AT AUGUST 31, 1929

Province	Stations	Elevators	Capacity
			bush.
MANITOBA—			
Country elevators	385	746	24,151,900
Manufacturing elevators	1 (2)	5	1,362,000
Private elevators	2 (5)	14	4,015,000
Total	388	765	29,528,900
SASKATCHEWAN—			
Country elevators	1,068	3,138	99,514,030
Manufacturing elevators	1 (2)	2	28,000
Public terminal elevators	(2)	2	7,000,000
Private elevators	1 (3)	4	2,510,000
Total	1,070	3,146	109,052,030
ALBERTA—			
Country elevators	572	1,597	59,576,500
Manufacturing elevators	1 (2)	3	710,000
Public terminal elevators	(2)	2	5,000,000
Private elevators	(3)	17	3,423,000
Total	573	1,619	68,709,500
BRITISH COLUMBIA—			
Country elevators	1	1	15,000
Manufacturing elevators	4	6	275,150
Public terminal elevators	1 (2)	2	3,100,000
Private elevators	1 (3)	16	11,007,000
Total	7	25	14,397,150
ONTARIO—			
Country elevators	(1)	1	40,000
Manufacturing elevators	(1)	2	195,000
Public terminal elevators	(2)	4	22,967,210
Private elevators	4	31	65,530,000
Total	4	38	88,732,210
WESTERN DIVISION	2,042	5,593	310,419,790
ONTARIO—Public elevators	11	15	31,150,000
QUEBEC—Public elevators	2	7	20,312,000
NEW BRUNSWICK—Public elevators	2	3	2,200,000
NOVA SCOTIA—Public elevators	1	2	1,500,000
EASTERN DIVISION	16	27	55,162,000
Grand total	2,058	5,620	365,581,790

"B"—LOADING PLATFORMS

During the season of 1927-28 the board dealt with a number of petitions for the erection and extension of grain loading platforms.

At April 15, 1929, there were loading platforms at 2,378 points in Western Canada, at which farmers could load grain, without putting such grain through country elevators, into 5,763 cars simultaneously.

SUMMARIZED STATEMENT OF GRAIN LOADING PLATFORMS IN WESTERN CANADA

As at April 15, 1929

—	Number of stations	Car capacity
Manitoba	647	1,732
Saskatchewan	1,081	2,694
Alberta	620	1,275
British Columbia	22	46
Ontario	8	16
	2,378	5,763

"C"—CARS OUT OF TURN

By virtue of section 192 of the Canada Grain Act, the board is accorded certain discretionary powers in connection with the supplying of cars for the shipment of grain at country points. During the year 1928-29 the board ordered six hundred and fifty-four (654) cars to be supplied out of turn for the relief of elevators in danger of collapse, for the shipment of seed grain, for grain urgently required for feeding and milling purposes, and for grain out of condition or insufficiently housed.

"D"—COMPLAINTS

During the year ending August 31, 1929, the board dealt with four hundred and thirty-five (435) complaints relating to inspection and weighing of grain, shipments ex country elevators, etc.

CHAPTER VI

MAXIMUM TARIFF OF PUBLIC TERMINAL ELEVATOR CHARGES AT FORT WILLIAM AND PORT ARTHUR TERMINALS

FOR THE YEAR ENDING AUGUST 31, 1930

Subject to the capacity of the elevator and the nature of its equipment, shipments will be received upon the following terms and conditions, and under the provisions of the Canada Grain Act, 1925, and amendments thereto.

ELEVATION CHARGES

On straight grade, tough, damp or wet grain receiving, elevating, shipping, storing and insurance against fire for the first fifteen days: flax, 2 cents per bushel; rye, 1½ cents per bushel; wheat, oats and barley, 1¼ cents per bushel.

All tough, damp, wet, condemned, heating, heated or fireburnt grain may always be refused. If received and stored it will only be at the owner's risk of deterioration. All damp grain and tough and damp flax will be dried without notice as soon after unloading as facilities will permit.

On mixed grains handled as mixtures, receiving, elevating, shipping, storing and insurance against fire for the first fifteen days, two cents (2c.) per hundred pounds.

On screenings, receiving, elevating, shipping, storing and insurance against fire for the first fifteen days, three cents (3c.) per hundred pounds.

STORAGE CHARGES

On straight grade and tough grain, not otherwise specified, including insurance against fire for each succeeding day or part thereof after the first fifteen days, one-thirtieth of one cent (1/30c.) per bushel.

On mixed grain handled as mixtures, storage, including insurance against fire for each succeeding day or part thereof after the first fifteen days, two-thirtieths of one cent (2/30c.) per hundred pounds.

On screenings, storage including insurance against fire for each succeeding day or part thereof after the first fifteen days, one-tenth of one cent (1/10c.) per hundred pounds.

SCREENINGS

On wheat carrying a dockage of three per cent (3%) or more, after deducting one-half of one per cent (½%) of the gross weight of the car for waste, a return will be made for the balance of screenings.

On wheat carrying a dockage containing three and one-half per cent (3½%) wild oats a separate return will be made for the wild oats, after deducting therefrom one-half of one per cent (½%) on the gross weight of the car for waste.

On oats and barley, carrying a dockage of over five per cent (5%) after deducting one-half of one per cent (½%) of the gross weight of the car for waste, a return will be made for the balance of the screenings.

On rye and flax carrying a dockage of over five per cent (5%) after deducting one per cent (1%) of the gross weight of the car to cover outward dockage and waste in cleaning, a return will be made for the balance of the screenings.

If disposition of screenings covered by outstanding returns is not received within thirty (30) days from the date of unloading, they may be disposed of for account of whom it may concern.

The holder of warehouse receipts or shut-outs covering dockage shall be entitled to receive such average quality of screenings as shall be determined by the Inspection Department in accordance with sample tests which shall be made in such manner and when deemed necessary by said department.

CLEANING CHARGES

On wheat, for removal of dockage, other than domestic grain, there will be cleaning charges as follows:—

Dockage, under 3 per cent, no charge.
Dockage, 3 per cent to 5 per cent, inclusive, one-half cent (½c.) per bushel.
Dockage, 5½ per cent to 10 per cent, one cent (1c.) per bushel.
Dockage over 10 per cent, one and one-half cents (1½c.) per bushel.

On wheat carrying a return of wild oats computed on the gross weight of the car, an additional separating charge of one-half cent (½c.) per bushel.

On oats, barley and rye, for removal of dockage, other than domestic grain, there will be cleaning charges as follows:—

On all cars carrying a dockage of:—

Up to and including 5 per cent, no charge.
Over 5 per cent and up to 10 per cent, oats and barley, one cent (1c.) per bushel.
Over 5 per cent and up to 10 per cent, rye, one and one-half cents (1½c.) per bushel.
Over 10 per cent, oats and barley, one and one-half cents (1½c.) per bushel.
Over 10 per cent, rye, two cents (2c.) per bushel.

On all grain carrying a return of other domestic grain (C.C. cars) computed on the gross weight of the car additional separating charges as follows:—

Dockage up to 10 per cent (Domestic Grain), three cents (3c.) per 100 pounds.
Dockage over 10 per cent and up to 15 per cent, four cents (4c.) per 100 pounds.
Dockage over 15 per cent, five cents (5c.) per 100 pounds.
Flax cleaned from any other grain containing broken particles that cannot be separated, shall be classified as " Flax and Broken Wheat."

On flax for removal of dockage, other than domestic grain, there will be cleaning charges as follows:—

On flax carrying a dockage of:—

Up to and including 5 per cent, no charge.
Over 5 per cent and up to 10 per cent, one and one-half cents (1½c.) per bushel.
Over 10 per cent, two cents (2c.) per bushel.

SPECIAL SEPARATIONS

Separations of mixed grains, or straight grade grains to improve grade, computed on gross weight of car, five cents (5c.) per one hundred pounds.
On all such separations a deduction of one per cent (1%) of the gross weight will be made to cover invisible loss in separation.

DRYING CHARGES

On tough grain, three cents (3c.) per bushel.
On damp or wet grain, five cents (5c.) per bushel.

ALLOWANCE FOR INVISIBLE LOSS AND SHRINKAGE ON ALL CARS

Wheat	30 pounds per car.
Oats	50 pounds per car.
Barley	50 pounds per car.
Mixed Grain	50 pounds per car.
Rye	56 pounds per car.
Flax	56 pounds per car.

ALL CHARGES

All charges for cleaning, drying or other treatment will be computed on gross weight of car, for elevation and storage on net weights. All charges accruing after issue of initial completed out-turn and expense bill will follow the grain. All charges whatsoever must be paid before shipment.

BULKHEADS

On bulkheads for their removal and other additional expense in handling and unloading car, five dollars ($5) per bulkhead.

UNLOADING SACKED GRAIN

A charge of five cents (5c.) per sack will be made for unloading all sacked grain.

PREPARING CARS FOR LOADING

When paper is used in preparing cars, there will be a charge of four dollars ($4) for each car.

UNSPECIFIED GRAIN

Unspecified grain will only be received, stored and treated subject to special charges to be agreed upon at the time, subject to the approval of the Board of Grain Commissioners.

Upon the application to the board of any public terminal elevator, the above tariff may be reduced insofar as that elevator is concerned, but such reduced charges must apply to all grain received at such elevator during the crop year 1929-30.

PUBLISHED BY THE BOARD OF GRAIN COMMISSIONERS FOR CANADA

F. J. RATHBONE,
Secretary.

Authorized by Order in Council P.C. 1883.

Dated at Ottawa, September 25, 1929.

BOARD OF GRAIN COMMISSIONERS FOR CANADA

FORT WILLIAM, ONT., November 4, 1929.

File No. 1485.

TO ALL OPERATORS OF PUBLIC AND PRIVATE ELEVATORS

For your information I give below rulings of the Board in connection with the interpretation of the tariff covering the operation of public terminal elevators:—

"On all cars of wheat containing three and one-half per cent (3½%) or over of Wild Oats the cleaning charge shall be based on the total dockage as set by the Inspection

Branch. The allowance of one-half of one per cent (½%) of the gross weight of the car is to be deducted from the Wild Oats, returns to be made for the 'Wild Oats' and the balance of the screenings, if any".

"Cars containing five per cent (5%) or over of 'Broken Wheat', practically free from seeds, will be graded C.C. for 'Broken Wheat' and a charge of three cents, (3c.) per hundred pounds may be assessed. When the Broken Wheat is less than five per cent (5%) or when mixed with other seeds, it will be treated as 'Screenings Broken Wheat' and the cleaning charges shall be assessed on the same basis as cars containing ordinary dockage".

By Order of the Board,

F. J. RATHBONE,
Secretary.

BOARD OF GRAIN COMMISSIONERS FOR CANADA

FORT WILLIAM, ONT., November 14, 1929.

File No. 1485.

TO ALL OPERATORS OF PUBLIC AND PRIVATE ELEVATORS

Further to the Board's circular letter under date of November 4, 1929, regarding returns for "Wild Oats", I am instructed to advise the Board is of the opinion that those elevators at present registering warehouse receipts, should issue warehouse receipts for oat scalpings (in bushels) instead of wild oats, such warehouse receipts to be submitted for registration to the Board's registrar.

By Order of the Board,

F. J. RATHBONE,
Secretary.

BOARD OF GRAIN COMMISSIONERS FOR CANADA

FORT WILLIAM, ONT., December 14, 1929.

File No. 1485.

TO ALL OPERATORS OF PUBLIC AND PRIVATE ELEVATORS

STORAGE CHARGES FOR OAT SCALPINGS

For your information I beg to advise that the Board has approved of the storage charges for Oats as contained in the present Tariff of Charges being applied on Oat Scalpings; Oat Scalpings to be considered on a basis of thirty-four (34) pounds to the bushel.

Yours truly,

F. J. RATHBONE,
Secretary.

MAXIMUM TARIFF CHARGES, GOVERNMENT INTERIOR TERMINAL ELEVATORS AT SASKATOON, MOOSE JAW, CALGARY, AND EDMONTON

FOR THE YEAR ENDED AUGUST 31, 1930

EFFECTIVE OCTOBER 7, 1929

Subject to the capacity of the elevator and the nature of its equipment, shipments will be received upon the following terms and conditions, and under the provisions of the Canada Grain Act, 1925, and amendments thereto.

ELEVATION CHARGES

On straight grade, tough, damp, or wet grain, not otherwise specified, receiving, elevating, shipping, storing and insurance against fire for the first fifteen days, one cent (1c.) per bushel.

All tough, damp, wet, condemned, heating, heated or fireburnt grain may always be refused. If received and stored, it will be only at the owner's risk of deterioration and under special contract, except that from November 1 to April 1 tough grain will be received and stored under the terms and conditions applying to straight grade grain as provided in sections 130 to 139 Canada Grain Act.

On mixed grains handled as mixture, receiving, elevating, shipping, storing and insurance against fire for the first fifteen days, one and one-half cents (1½c.) per hundred pounds.

On screenings, receiving, elevating, shipping, storing and insurance against fire for the first fifteen days, three cents (3c.) per hundred pounds.

On grain unloaded from wagons, or teams, receiving, elevating, cleaning, shipping, insurance against fire, storage for the first fifteen days, one and one-half cents (1½c.) per bushel.

STORAGE CHARGES

On straight grade and tough grain, not otherwise specified, including insurance against fire for each succeeding day or part thereof, after the first fifteen days, one-sixtieth of one cent (1/60c.) per bushel.

On mixed grain handled as mixtures, storage, including insurance against fire for each succeeding day or part thereof, after the first fifteen days, one-thirtieth of one cent (1/30c.) per hundred pounds.

On screenings, storage, including insurance against fire for each succeeding day or part thereof, after the first fifteen days, one-tenth of one cent (1/10c.) per hundred pounds.

SCREENINGS

On wheat carrying a dockage of three per cent (3%) or more, after deducting one-half of one per cent (½%) of the gross weight of the car for waste, a return will be made for the balance of the screenings.

On wheat carrying a dockage containing three and one-half per cent (3½%) wild oats, a separate return will be made for the wild oats after deducting therefrom one-half of one per cent (½%) of the gross weight of the car for waste.

On oats and barley carrying a dockage of over five per cent (5%) after deducting one-half of one per cent (½%) of the gross weight of the car for waste, a return will be made for the balance of the screenings.

On rye and flax carrying a dockage of over five per cent (5%) after deducting one per cent (1%) of the gross weight of the car to cover outward dockage and waste in cleaning, a return will be made for the balance of the screenings.

If disposition of screenings covered by outstanding returns is not received within thirty (30) days from the date of unloading, they may be disposed of for account of whom it may concern.

The holder of warehouse receipts or shut-outs covering dockage shall be entitled to receive such average quality of screenings as shall be determined by the Inspection Department in accordance with sample tests which shall be made in such manner and when deemed necessary by said department.

Cleaning Charges

On wheat, for removal of dockage, other than domestic grain, there will be cleaning charges as follows:—

Dockage under 3 per cent, no charge.

Dockage 3 per cent to 5 per cent inclusive, one-half cent (½c.) per bushel.

Dockage 5½ per cent to 10 per cent, one cent (1c.) per bushel.

Dockage over 10 per cent, one and one-half cents (1½c.) per bushel.

On wheat carrying a return of wild oats computed on the gross weight of the car, an additional separating charge of one-half cent (½c.) per bushel.

On oats, barley and rye, for removal of dockage, other than domestic grain, there will be cleaning charges as follows:—

On all cars carrying a dockage of—

Up to and including 5 per cent, no charge.

Over 5 per cent and up to 10 per cent, oats and barley, one cent (1c.) per bushel.

Over 5 per cent and up to 10 per cent, rye, one and one-half cents (1½c.) per bushel.

Over 10 per cent, oats and barley, one and one-half cents (1½c.) per bushel.

Over 10 per cent, rye, two cents (2c.) per bushel.

On all grain carrying a return of other domestic grain (C.C. cars) computed on the gross weight of the car, additional separating charges as follows:—

Dockage up to 10 per cent (domestic grain), three cents (3c.) per 100 pounds.

Dockage over 10 per cent and up to 15 per cent, four cents (4c.) per 100 pounds.

Dockage over 15 per cent, five cents (5c.) per 100 pounds.

Flax cleaned from any other grain containing broken particles that cannot be separated shall be classified as "Flax and Broken Wheat."

On flax, for removal of dockage, other than domestic grain, there will be cleaning charges as follows:—

On flax carrying a dockage of—

Up to and including 5 per cent, no charge.

Over 5 per cent and up to 10 per cent, one and one-half cents (1½c.) per bushel.

Over 10 per cent, 2 cents (2c.) per bushel.

Special Separations

Separations of mixed grains, or straight grade grains to improve grade, computed on gross weight of car, five cents (5c.) per one hundred pounds.

On all such separations a deduction of one per cent (1%) of the gross weight will be made to cover invisible loss in separation.

Drying Charges

On tough grain, three cents (3c.) per bushel.
On damp or wet grain, five cents (5c.) per bushel.

Allowance for Invisible Loss and Shrinkage

On all grain received, deductions from the gross weight of each car to cover invisible loss and shrinkage in handling will be made as follows:—

Wheat	30 pounds
Oats	50 pounds
Barley	50 pounds
Flax	56 pounds
Rye	56 pounds
Mixed grain	50 pounds

All Charges

All charges for cleaning, drying or other treatments will be computed on gross weight, for elevation and storage on net weights, all charges accruing after issue of initial completed outturn and expense bill will follow the grain. All charges whatsoever must be paid before shipment.

Bulkheads

On bulkheads, for their removal and other additional expense in handling, and unloading car, five dollars ($5) for each bulkhead.

Unloading Sacked Grain

A charge of five cents (5c.) per sack will be made for unloading all sacked grain.

Sacking Grain

Sacking grain and loading to cars or other vehicles will be subject to rate agreed upon.

Preparing Cars for Loading

When paper is used in preparing cars there will be a charge of four dollars ($4) for each car.

Unspecified Grain

Unspecified grain will only be received, stored and treated subject to special charges to be agreed upon at the time subject to the approval of the Board of Grain Commissioners.

This tariff of rates is published by the Board of Grain Commissioners for Canada in accordance with section 127 of the Canada Grain Act and shall become effective as from October 7, 1929.

BOARD OF GRAIN COMMISSIONERS FOR CANADA.

F. J. Rathbone,
Secretary.

Fort William, Ontario.

99461—3

COUNTRY ELEVATORS

Maximum Tariff of Charges for Licensed Country Elevators for the Period ending August 31, 1930. Effective September 1, 1929

Subject to the capacity of the elevator and the nature of the construction, all grain tendered must be taken into store upon following terms and conditions, and under the provisions of The Canada Grain Act, 1925, and amendments thereto.

Maximum Rates—Special Bin Grain.—Receiving, elevating, spouting, insurance against fire, storing for the first fifteen (15) days and putting into cars on track; no elevator shall charge more than three cents (3c.) per bushel for Flax, two and one-half cents (2½c.) per bushel for Wheat, Barley and Rye, and one and three-quarter cents (1¾c.) per bushel for Oats.

Graded Storage and Subject to Grade and Dockage Grain.—Receiving, elevating, spouting, insurance against fire, storing for the first fifteen days and putting into cars on track; no elevator shall charge more than three cents (3c.) per bushel for Flax, two cents (2c.) per bushel for Wheat, Barley and Rye, and one and three-quarter cents (1¾c.) per bushel for Oats. *Storage* not otherwise provided, including insurance against fire, for each succeeding day after the first fifteen (15) days shall not exceed one-thirtieth of one cent (1/30c.) per bushel.

Cleaning.—The rate for cleaning grain shall be mutually agreed upon by the elevator operator and the owner of the grain according to the nature of its dockage, but in no case shall the rate exceed a maximum of two cents (2c.) per bushel.

Shrinkage.—No elevator shall take more than the allowance for shrinkage, waste in handling, storing and transmitting the grain to a terminal than the weight in pounds set forth in the shrinkage table as authorized by the Governor in Council and declared to form part of the tariff and Rules and Regulations for Country Elevators.

All shrinkage on tough and damp grain shall not be more than double the allowance as set forth in the aforesaid schedule.

Such shrinkage table shall be placed conspicuously in all licensed country elevators for free inspection of the public.

Dockage on Cash or Stored Grain.—No elevator shall take a greater dockage than that shown by a proper test over a number ten sieve, except where the grains contain foreign grain or seeds which cannot be taken out by a number ten sieve.

Every elevator must be equipped with the necessary sieves and scales for making proper tests, and the elevator operator must make the test in the presence of the owner of the grain when requested.

General.—When tough, damp or wet grain is taken into store it shall be at the owner's risk, and the elevator operator shall have the right to ship it immediately to a terminal elevator for treatment.

All tough, damp or wet grain, containing an excessive amount of snow and ice, may be handled subject to agreement between the owner of the grain and the operator.

Rules and Regulations for Country Elevators

1. The owner or operator of a country elevator shall post in the elevator in a conspicuous place, a diagram to a scale of not less than one-half inch to one foot, showing the location and numbers of the several bins in such elevator.

2. In shipping or delivering any grain stored in a country elevator, the net weight on the ticket or tickets shall be final, unless an investigation by the Board of Grain Commissioners shows reason for the contrary. The shipper to be paid in case of short shipment up to the amount of his or her ticket or tickets for the full billing capacity of the car, at the same price as the car was disposed of.

3. All shipping bills for grain shipped through an elevator shall be made out by the elevator agent, and he shall advise such parties as the owner may instruct.

4. The owner of grain in an elevator wishing such grain shipped to any point other than a terminal point, or where Government weights cannot be obtained, the owner of the grain must then accept the elevator weights at the shipping point as final unless it is proved that the shipping weights are not correct. Provided, moreover, the owner of the grain can always demand an affidavit as to the actual grain shipped and delivered from the elevator operator and receiver of said grain respectively.

5. No owner or operator of a country elevator or warehouse shall sell, assign, mortgage, pledge, or hypothecate any grain stored in such elevator or warehouse, for which storage tickets have been issued, and the owner or operator may be required by the Board to produce at any time proper registered warehouse receipts or bills of lading for such grain as has been shipped from the country elevator or warehouse, and for which there is still outstanding storage tickets.

6. No licence will be granted for the operation of any country elevator the agent or buyer of which is subject to a shortage bond, and in the event of a shortage bond being entered into after license has been granted, such licence will be subject to immediate cancellation.

RULES AND REGULATIONS FOR HANDLING GRAIN FOR WHICH SPECIAL BIN OR SUBJECT TO GRADE AND DOCKAGE TICKETS HAVE BEEN ISSUED, OR WHERE THERE IS DISAGREEMENT AS TO GRADE AND DOCKAGE

1. The ticket or tickets issued where there is a disagreement as to grade and dockage or where grain has been received subject to inspector's grade and dockage must have incorporated thereon at the time of issue the grade offered by the elevator owner or operator to the owner of the grain and the following words: "Subject to Inspector's Grade and Dockage."

2. The owner of the grain can only demand the quantity that the storage ticket or tickets call for.

3. In case there is a dispute as to the weighing accuracy of the receiving scales, it shall be incumbent upon the owner of the elevator to prove that the scales are weighing accurately.

4. In the case of special bin or subject to grade and dockage grain a proper sample must be drawn from each load by the elevator operator at the time of delivery, in the presence of the party delivering same, and such sample must be drawn satisfactorily to both the deliverer and the operator, and all such samples must be placed in a suitable receptacle satisfactory to the Board of Grain Commissioners, and must be properly mixed in such receptacle. The receptacle shall be provided by the warehouseman and the sample shall be placed therein in the presence of the owner. The receptacle shall be secured by padlock which the owner of the grain shall provide, and the key of which he shall retain. The warehouseman shall be the custodian of the receptacle and of the sample.

5. In the case of subject to grade and dockage grain, a fair and proper sample of at least 2 quarts shall then be drawn in the presence of the owner of the grain from such receptacle, and forwarded in a suitable receptacle properly tied and sealed, and marked "Subject to Inspector's Grade and Dockage," to the Chief Inspector of Grain, and shall be accompanied by a request in writing of either or both parties aforesaid that the Chief Inspector will examine the sample and report on the grade and dockage the grain is in his opinion entitled to, and would receive if shipped to a terminal point and subjected to an official inspection.

6. After receiving the inspector's judgment, showing the grade and dockage the elevator operator shall in the case of cash tickets make settlement on the basis of the grade and dockage given by the Chief Inspector, and shall, in the case of subject to grade and dockage tickets, issue graded storage tickets showing the grade and dockage as given by the Chief Inspector for the full amount of grain so taken into store, such graded storage tickets to bear the same date as the original subject to grade and dockage tickets, after which the grain shall be subject to the rules and regulations covering graded stored grain.

7. Notwithstanding any regulation provided in paragraphs five and six of these regulations, if the identity of the grain has been preserved even though subject to grade and dockage tickets may have been issued therefor, if agreeable to the owner, the grain then may be handled in accordance with the provisions of the Canada Grain Act, and Rules and Regulations relating to the special binning of grain in country elevators.

8. At the time of delivery of any grain where a ticket of this kind is being used, and it is agreed upon by the owner of the grain and the elevator operator that the grain is tough, damp or wet, and the elevator operator marks such ticket or tickets: "Out of condition, tough, damp or wet," then whatever grade such sample may receive from the Chief Inspector, it will still grade "tough, damp or wet."

9. If the elevator operator fails at any time to draw and preserve such sample in the manner stated herein, the owner or operator must account to the owner of the grain for the grade designated by the said owner.

10. When submitting samples of grain to the Chief Inspector, elevator operators must have such samples properly marked either "Special Bin" or "Subject to Inspector's Grade and Dockage" as the case may be.

Approved by Board of Grain Commissioners for Canada.

F. J. RATHBONE,
Secretary.

Authorized by Order in Council P.C. 1787.

Dated at Ottawa, September 12, 1929.

SHRINKAGE TABLE

Wheat, Flax and Rye			Oats			Barley		
Gross bushels	Gross weight in pounds	Shrinkage allowance	Gross bushels	Gross weight in pounds	Shrinkage allowance	Gross bushels	Gross weight in pounds	Shrinkage allowance
	lb. lb.	lb.		lb.	lb.		lb.	lb.
Up to and including 25 bushels...	1,500 1,400	5	Up to and including 25 bushels.....	850	5	Up to and including 25 bushels.....	1,200	5
Over 25 bushels. to 42 "	1,500 1,400 2,520 2,352	10	Over 25 bushels... to 42 " ..	850 1,428	6	Over 25 bushels... to 42 " ..	1,200 2,016	8
Over 42 " to 58 "	2,520 2,352 3,480 3,248	15	Over 42 " .. to 58 " ..	1,428 1,972	8	Over 42 " .. to 58 " ..	2,016 784	12
Over 58 " to 75 "	3,480 3,248 4,500 4,200	20	Over 58 " .. to 75 " ..	1,972 2,550	11	Over 58 " .. to 75 " ..	2,784 3,600	16
Over 75 " to 92 "	4,500 4,200 5,520 5,152	25	Over 75 " .. to 92 " ..	2,550 3,128	14	Over 75 " .. to 92 " ..	3,600 4,416	20
Over 92 " to 108 "	5,520 5,152 6,480 6,048	30	Over 92 " .. to 108 " ..	3,128 3,672	17	Over 92 " .. to 108 " ..	4,416 5,184	24
Over 108 " to 125 "	6,480 6,048 7,500 7,000	35	Over 108 " .. to 125 " ..	3,672 4,250	20	Over 108 " .. to 125 " ..	5,184 6,000	28
Over 125 " to 142 "	7,500 7,000 8,520 7,952	40	Over 125 " .. to 142 " ..	4,250 4,828	23	Over 125 " .. to 142 " ..	6,000 6,816	32
Over 142 " to 158 "	8,520 7,952 9,480 8,848	45	Over 142 " .. to 158 " ..	4,828 5,372	26	Over 142 " .. to 158 " ..	6,816 7,584	36

Shrinkage.—No elevator shall take more than the allowance for shrinkage, waste in handling, storing and transmitting the grain to a terminal than the weight in pounds set forth in this shrinkage table as authorized by the Governor in Council and declared to form part of the tariff and Rules and Regulations for Country Elevators. All shrinkage on tough and damp grain shall not be more than double the allowance as set forth in this schedule. This shrinkage table shall be placed conspicuously in all licensed country elevators for free inspection of the public.

The above table applies to cash, special binned and stored to grade grain.

Authorized by Order in Council P.C. 1787.

Dated at Ottawa, September 12, 1929.

Approved by Board of Grain Commissioners for Canada,

F. J. RATHBONE,
Secretary.

MAXIMUM TARIFF OF PUBLIC TERMINAL ELEVATOR CHARGES AT VANCOUVER, BRITISH COLUMBIA

For the Year Ending August 31, 1930

Subject to the capacity of the elevator and the nature of its equipment, shipments will be received upon the following terms and conditions and under the provisions of the Canada Grain Act, 1925, and amendments thereto:—

Elevation Charges

On straight grade, tough, damp or wet grain, not otherwise specified, receiving, elevating, shipping, storing and insurance against fire for the first fifteen days, flax, two cents (2c.) per bushel; rye, one and one-half cents (1½c.) per bushel; wheat, oats and barley, one and one-quarter cents (1¼c.) per bushel.

All tough, damp, wet, condemned, heating, heated or fireburnt grain may always be refused, if received and stored it will only be at the owner's risk of deterioration and under special contract, except that tough grain will be received and stored under the terms and conditions applied to straight grade grain as provided in the Canada Grain Act and provisions included in the special provisions made for the Port of Vancouver. (See Canada Grain Act, 1925, and amendments thereto.)

On mixed grains, handled as mixtures, receiving, elevating, shipping, storing and insurance against fire for the first fifteen days, two cents (2c.) per hundred pounds.

On screenings, receiving, elevating, shipping, storing and insurance against fire for the first fifteen days, three cents (3c.) per hundred pounds.

Storage Charges

On straight grade and tough grain, not otherwise specified, including insurance against fire, for each succeeding day or part thereof, after the first fifteen days, one-thirtieth of one cent ($\frac{1}{30}$ c.) per bushel.

On mixed grain handled as mixtures, storage, including insurance against fire, for each succeeding day or part thereof, after the first fifteen days, two-thirtieths of one cent ($\frac{2}{30}$ c.) per hundred pounds.

On screenings, storage, including insurance against fire, for each succeeding day or part thereof, after the first fifteen days, one-tenth of one cent ($\frac{1}{10}$c.) per hundred pounds.

Screenings

On wheat carrying a dockage of three per cent (3%) or more, after deducting one-half of one per cent (½%) of the gross weight of the car for waste, a return will be made for the balance of the screenings.

On wheat carrying a dockage containing three and one-half per cent (3½%) wild oats a separate return will be made for the wild oats, after deducting therefrom one-half of one per cent (½%) on the gross weight of the car for waste.

On oats and barley, carrying a dockage of over five per cent (5%) after deducting one-half of one per cent (½%) of the gross weight of the car for waste, a return will be made for the balance of the screenings.

On rye and flax carrying a dockage of over five per cent (5%) after deducting one per cent (1%) of the gross weight of the car to cover outward dockage and waste in cleaning, a return will be made for the balance of the screenings.

If disposition of screenings covered by outstanding returns is not received within thirty (30) days from the date of unloading, they may be disposed of for account of whom it may concern.

The holder of warehouse receipts or shut-outs covering dockage shall be entitled to receive such average quality of screenings as shall be determined by the Inspection Department in accordance with sample tests which shall be made in such manner and when deemed necessary by said Department.

Cleaning Charges

On wheat, for removal of dockage, other than domestic grain, there will be cleaning charges as follows:—

Dockage under 3 per cent, no charge.

Dockage 3 per cent to 5 per cent inclusive, one-half cent (½c.) per bushel.

Dockage 5½ per cent to 10 per cent, one cent (1c.) per bushel.

Dockage over 10 per cent, one and one-half cents (1½c.) per bushel.

On wheat carrying a return of Wild Oats computed on the gross weight of the car, an additional separating charge of one-half of one cent (½c.) per bushel.

On oats, barley and rye, for removal of dockage, other than domestic grain, there will be cleaning charges as follows:—

On all cars carrying a dockage of:—

Up to and including 5 per cent, no charge.

Over 5 per cent and up to 10 per cent, oats and barley, one cent (1c.) per bushel.

Over 5 per cent and up to 10 per cent, rye, one and one-half cents (1½c.) per bushel.

Over 10 per cent, oats and barley, one and one-half cents (1½c.) per bushel.

Rye, two cents (2c.) per bushel.

On all grain carrying a return of other domestic grain (C.C. Cars) computed on the gross weight of the car additional separating charges as follows:—

Dockage up to 10 per cent (Domestic Grain), three cents (3c.) per 100 pounds.

Dockage over 10 per cent and up to 15 per cent, four cents (4c.) per 100 pounds.

Dockage over 15 per cent, five cents (5c.) per 100 pounds.

Flax cleaned from any other grain containing broken particles that cannot be separated, shall be classified as "Flax and Broken Wheat".

On Flax for removal of dockage, other than domestic grain, there will be cleaning charges as follows:—

On flax carrying a dockage of: up to and including 5 per cent, no charge; over 5 per cent and up to 10 per cent, one and one-half cents (1½c.) per bushel; over 10 per cent, two cents (2c.) per bushel.

Special Separations

Separations of mixed grains, or straight grade grains to improve grade, computed on gross weight of car, five cents (5c.) per one hundred pounds.

On all such separations a deduction of one per cent (1%) of the gross weight will be made to cover invisible loss in separation.

Drying Charges

On tough grain, three cents (3c.) per bushel.

On damp or wet grain, five cents (5c.) per bushel.

Allowance for Invisible Loss and Shrinkage on All Cars

Wheat	30 pounds per car
Oats	50 pounds per car
Barley	50 pounds per car
Mixed grain	50 pounds per car
Rye	56 pounds per car
Flax	56 pounds per car

All Charges

All charges for cleaning, drying or other treatment will be computed on gross weight of car; for elevation and storage, on net weights. All charges accruing after issue of initial completed out-turn and expense bill will follow the grain. All charges whatsoever, must be paid before shipment.

Bulkheads

On bulkheads for their removal and other additional expense in handling and unloading cars, $5 for each bulkhead.

Unloading Sacked Grain

A charge of five cents (5c.) per sack will be made for unloading all sacked grain.

Sacking Grain

For sacking grain the following charges will be made: 1½c. per bushel on sacks not exceeding 125 pounds; 2c. per bushel on sacks not exceeding 160 pounds; 2½c. per bushel on sacks not exceeding 220 pounds.

For double sacking one cent (1c.) per sack in addition to above.

For sacking screenings a charge of ten cents (10c.) a sack for sacking will be made.

Sacking of Screenings will be done only when conditions warrant it, and the Superintendents of such terminal elevators will be the sole judge of this.

Sacks and twine to be furnished by the shipper or supplied at his expense. In case of machine sewing, one-half of one cent (½c.) per sack will be charged for twine.

STENCILLING

A charge of one-half cent (½c.) per sack will be made for stencilling.

Preparing Cars for Loading

When paper is used in preparing cars, there will be a charge of four dollars ($4) for each car.

Unspecified Grain

Unspecified grain will only be received, stored and treated subject to special charges to be agreed upon at the time, subject to the approval of the Board of Grain Commissioners.

Upon the application to the Board of any Public Terminal Elevator, the above tariff may be reduced in so far as that elevator is concerned, but such reduced charges must apply to all grain received at such elevator during the Crop Year 1929-30.

Published by the Board of Grain Commissioners for Canada.

F. J. RATHBONE,
Secretary.

Authorized by Order in Council, P.C. 1884,

Dated at Ottawa, September 25, 1929.

CHAPTER VII

MEMORANDUM *RE* INTERPRETATION OF CERTAIN SECTIONS DEALING WITH THE CAR ORDER BOOK

Section 179, ss. 1

This section requires that there shall be kept a Car Order Book for each shipping point, thus where an agent bills cars for a siding adjacent to his station, where there is no agent he will have to keep two books, unless a Car Order Book custodian is appointed for such siding as provided in ss. 3.

Section 180, ss. 1, 2 and 3

This section gives a farmer the right to appoint an agent to order a car for him. An individual's right to order a car for himself, however, is not disturbed by acting as agent for another applicant, but an individual who has acted as an agent cannot act in that capacity again until the previous order for a car filed by him as agent, has been filled or cancelled.

Orders for cars for Indians on Reserve may be filed by Indian Agent repeating each application for each car in turn with other applicants for cars. When making application Indian Reserve should be quoted instead of section, etc.

Section 180, ss. 4

The words "Country Elevator" mean an order for a car for a person or company operating an elevator at any given point for its own use only.

Section 181, ss. 2

This section is intended to cover shipments by a loader or from a loading-platform. It provides that farmers may combine for the purpose set forth in said sub-sections without disturbing their rights as set forth in section 180.

Section 182, ss. 3

The "Land" is interpreted to mean the area being operated as one farm, hence a person operating several farms at different points can have more than one application for a car on the Order Books, providing they are not for grain from the same farm, and providing they are at different shipping points.

The same applicant can not have more than one unfilled order on the book for same land but lessor and tenant who are different applicants and who are each actual owners of a carload of grain can file applications.

Section 185, ss. 1

The onus to notify an applicant for a car that a car is available rests upon the railway companies as formerly, although on account of the new form of Order Book the provision respecting the posting of lists has been omitted from the Act.

Section 188, ss. 2

This means that there shall not be standing more than one application in the name of any person on any specific Car Order Book.

Section 191, ss. 1, paragraph "C"

The penalty is for more than one unfilled order on the Car Order Book or for having an unfilled order for a car for the shipment of the *same grain* on more than one Car Order Book.

N.B.—When application is made for a car the applicant or his agent should indicate to the railway agent the method by which notice may be given to him that a car is available.

Board of Grain Commissioners for Canada.

F. J. RATHBONE, *Secretary.*

CHAPTER VIII

Summary of Anual Weigh-Up of Grain in Public Terminal Elevators, 1929

Elevator Company	Wheat		Oats		Barley		Flaxseed		Rye		Mixed Grain	
	Surplus	Deficit	Surplus	Deficit	Surplus	Deficit	Surplus	Deficit	Surplus	Deficit	Surplus	Deficit
	bush.	bush.	bush.	bush.	bush.	bush.	bush.	bush.	bush.	bush.	lbs.	lbs.
Fort William-Port Arthur—												
Grand Trunk Pacific Terminal Elevator Co.	32,361-20	.....	6,111-04	.....	5,720-22	.....	351-02	.....	.....	3,261-53	212,144	.....
Saskatchewan Pool Terminal No. 4	.....	51,583-30	9,789-17	.....	15,947-17	.....	.....	2,422-50	.....	886-36	.....	551,799
Saskatchewan Pool Terminal No. 6	.....	33,742-00	12,146-32	.....	23,136-30	.....	628-50	.....	.....	4,113-04	.....	780,844
Canadian Government Elevators	4,970-20	.....	2,430-24	.....	1,581-35	.....	.....	3,232-04	.....	1,346-21	59,285	.....
Vancouver—												
Pacific Terminal Co.	1,206-20	.....	597-22	.....	.....	.....	.....	.....	.....	.....	.....	.....
Victoria—												
Panama Pacific Grain Terminals Ltd.	308-20	.....	.....	.....	47-24	.....	.....	.....	.....	.....	.....	.....
Totals	38,846-20	85,325-30	31,075-31	.....	46,433-32	.....	979-52	5,654-54	.....	9,608-0[illegible]	271,429	1,332,643
Total net..... Surplus or Deficit	.....	46,479-10	31,075-31	.....	46,433-32	.....	.....	4,675-02	.....	9,608-0[illegible]	.....	1,061,214

CHAPTER IX

Sessions Held by the Board during Crop Year 1928-29

Date	Place	Subject matter
1928		
Sept. 8	Winnipeg, Man.	Routine matters.
" 13	Fort William, Ont.	Routine matters.
" 17	Fort William, Ont.	Routine matters.
" 20	Winnipeg, Man.	Routine matters.
" 26	Fort William, Ont.	Routine matters.
" 27	Fort William, Ont.	Investigation of complaints and routine matters.
Oct. 1	Fort William, Ont.	Investigation of complaints and routine matters.
" 2	Fort William, Ont.	Conference with Hon. W. R. Motherwell for discussion of matters relating to the grading of grain. Investigation of complaints and routine matters.
" 3	Fort William, Ont.	Routine matters.
" 5	Winnipeg, Man.	Investigation of complaints.
" 20	Winnipeg, Man.	Routine matters.
" 22	Fort William, Ont.	Investigation of complaints and routine matters.
" 29	Fort William, Ont.	Routine matters.
Nov. 1	Winnipeg, Man.	Routine matters.
" 7	Winnipeg, Man.	Routine.
" 15	Winnipeg, Man.	Investigation of complaints and routine matters.
" 20	Winnipeg, Man.	Investigation of complaints and routine matters.
" 22	Winnipeg, Man.	Investigation of complaints.
" 27	Fort William, Ont.	Investigation of complaints and routine.
Dec. 4	Winnipeg, Man.	Meeting with Dr. Tory, president of the National Research Council *re* problems to be undertaken by the Grain Committee of the Research Council.
" 5	Winnipeg, Man.	Investigation of complaints and routine matters.
" 10	Fort William, Ont.	Investigation of complaints and routine matters.
" 12	Winnipeg, Man.	Investigation of complaints.
" 13	Winnipeg, Man.	Investigation of complaints and routine matters.
" 15	Fort William, Ont.	Investigation of complaints and routine matters.
" 18	Montreal, Que.	Meeting for purpose of discussing the matter of mixing Canadian grain with American grades of grain.
1929		
Jan. 12	Fort William, Ont.	Investigation of complaints and routine matters.
" 22	Rowley, Alta.	Investigation of complaint filed by Thomson Bros. of Rowley, Alta., against the Home Grain Co., Ltd.
Feb. 12	Fort William, Ont.	Investigation of complaints and routine matters.
" 14	Ottawa, Ont.	Conference with Hon. Jas. Malcolm, Minister of Trade and Commerce, *re* grading of Garnet wheat.
" 16	Montreal, Que.	Investigation of complaints and routine matters.
" 19	Ottawa, Ont.	Conference with Hon. Jas. Malcolm, Minister of Trade and Commerce, Hon. Mr. Dunning, and other members of parliament *re* matters relating to the administration of the Canada Grain Act.
" 21	Fort William, Ont.	Meeting with the representatives of an association of elevator operators regarding matters relating to the operation of terminal elevators.
" 22	Winnipeg, Man.	Investigation of complaints and routine matters.
" 24	Winnipeg, Man.	Investigation of complaints.
April 2	Edmonton, Alta.	Meeting with the Grain Section of the Edmonton Board of Trade *re* grading of grain.
" 2	Edmonton, Alta.	Investigation of complaint filed by J. P. Richardson of Colinton, Alta., against the Alberta Pacific Grain Company Limited.
June 24	Fort William, Ont.	Investigation of complaints and routine matters.
July 4	Fort William, Ont.	Investigation of complaints and routine matters.
Aug. 22	Fort William, Ont.	New Board, Oath of Office and routine matters.
" 30	Winnipeg, Man.	Tariff of charges, Public Terminal and Country elevators; also Rules and Regulations Country Elevators; investigation of complaints and routine matters.

CHAPTER X

STATEMENT of Revenue and Expenditure for Crop Year Ending August 31, 1929—Eastern and Western Divisions

WESTERN DIVISION

(A) WINNIPEG—			
Receipts—Inspection fees	$ 292,992 00		
Weighing fees	25,162 50		
Samples sold	11,815 65		
Overtime	1,147 35		
Refund express	2,286 45		
Splits	364 90		
Sundries	23 80		
Condition reports	8,494 25		
		$ 342,286 90	
Expenditure—Salaries—Inspection	366,427 40		
Salaries—Weighing	90,423 82		
Rents—Inspection	26,322 00		
Rents—Weighing	2,095 00		
Expenses—Inspection	24,046 63		
Expenses—Weighing	1,015 21		
		510,330 06	
Deficit			$ 168,043 16
(B) KEEWATIN—			
Receipts—Weighing fees	6,827 00		
Overtime	60 60		6,887 60
Expenditure—Salaries—Weighing	6,149 60		
Expenses	164 30		
		6,313 90	
Surplus			$ 573 70
(C) KENORA—			
Receipts—Weighing fees	2,742 00		
Overtime	181 00		
		2,923 00	
Expenditure—Salaries—Weighing	1,981 00		
Expenses	79 00		
		2,060 00	
Surplus			$ 863 00
(D) PETERBOROUGH—			
Receipts—Weighing fees	2,448 00		
		2,448 00	
Expenditure—Salaries—Weighing	2,390 00		
		2,390 00	
Surplus			$ 58 00
(E) PORTAGE LA PRAIRIE—			
Receipts—Weighing fees	4,011 50		
Overtime	5 50		
		4,017 00	
Expenditure—Salaries—Weighing	4,925 50		
		4,925 50	
Deficit			908 50
(F) PRINCE RUPERT—			
Receipts—Inspection fees	$ 2,572 00		
Weighing fees	4,477 00		
Samples sold	101 14		
		$ 7,150 14	
Expenditure—Salaries—Inspection	5,410 50		
Salaries—Weighing	4,045 50		
Expenses—Inspection	40 15		
Expenses—Weighing	8 90		
		9,505 05	
Deficit			$ 2,354 91

WESTERN DIVISION—*Continued*

(G) TRANSCONA—			
Receipts—Inspection fees		2,700 00	
Weighing fees		6,330 00	
Overtime		134 15	
			9,164 15
Expenditure—Salaries—Inspection		4,416 00	
Salaries—Weighing		4,496 00	
			8,912 00
Surplus			$ 252 15
(H) SASKATOON—			
Receipts—Inspection fees		10,929 50	
Weighing fees		12,198 00	
Samples sold		182 41	
Overtime		784 75	
			24,094 66
Expenditure—Salaries—Inspection		13,170 25	
Salaries—Weighing		11,279 70	
Rent—Inspection		1,220 80	
Sundries—Inspection		827 38	
			26,498 13
Deficit			$ 2,403 47
(I) MOOSE JAW—			
Receipts—Inspection fees		39,173 00	
Weighing fees		10,886 00	
Samples sold		1,740 85	
Overtime		347 95	52,147 80
Expenditure—Salaries—Inspection		56,074 06	
Salaries—Weighing		8,856 27	
Rent—Inspection		1,336 00	
Sundries—Inspection		2,354 28	
			68,620 61
Deficit			$ 16,472 81
(J) CALGARY—			
Receipts—Inspection fees		51,548 00	
Weighing fees		19,721 83	
Samples sold		1,844 05	
Sundries		16 75	
Overtime		531 00	
			73,661 63
Expenditure—Salaries—Inspection		46,030 45	
Salaries—Weighing		20,517 86	
Rent—Inspection		2,506 60	
Sundries		5,696 46	
			74,751 37
Deficit			$ 1,089 74
(K) EDMONTON—			
Receipts—Inspection fees		39,493 00	
Weighing fees		6,274 00	
Samples sold		1,211 93	
Sundries		0 50	
Overtime		101 00	
			47,080 43
Expenditure—Salaries—Inspection		45,310 69	
Salaries—Weighing		6,549 75	
Rent—Inspection		4,480 00	
Sundries—Inspection		3,593 18	
Sundries—Weighing		44 00	
			59,977 62
Deficit			$ 12,897 19
(L) VANCOUVER—			
Receipts—Inspection fees		98,466 00	
Weighing fees		171,534 00	
Samples sold		1,068 32	
Overtime		233 75	
			271,302 07
Expenditure—Salaries—Inspection		84,451 76	
Salaries—Weighing		61,311 95	
Rent—Inspection		300 00	
Sundries—Inspection		3,839 02	
Sundries—Weighing		974 38	
			150,877 11
Surplus			$ 120,424 96

STATEMENT of Revenue and Expenditure for Crop Year Ending August 31, 1929—Eastern and Western Divisions—*Continued*

WESTERN DIVISION—*Continued*

(M) SUPERIOR—			
Receipts—Inspection fees	2,578 90		
			2,578 90
Expenditure—Salaries—Inspection	4,196 00		
Expenses	70 45		
			4,266 45
Deficit		$	1,687 55
(N) VICTORIA—			
Receipts—Inspection fees	193 00		
Weighing fees	340 00		
			533 00
Expenditure—Inspection—Salaries	1,440 00		
Weighing—Salaries	2,050 00		
Expenses	4 50		
			3,494 50
Deficit		$	2,961 50
(O) MEDICINE HAT—			
Receipts—Inspection fees	6,053 31		
Weighing fees	6,895 35		
Overtime	362 00		13,310 66
Expenditure—Salaries—Inspection	5,526 50		
Salaries—Weighing	6,996 00		
Rent inspection	300 00		
Expenses	488 16		
			13,310 66
(P) FORT WILLIAM—			
Receipts—Inspection fees	376,399 00		
Weighing fees	677,076 30		
Samples sold	7,166 10		
Splits	12 70		
Overtime	26,041 49		
			1,086,695 59
Expenditure—Salaries—Inspection	383,542 01		
Salaries—Weighing	315,981 61		
Rent—Inspection	9,136 35		
Rent—Weighing	3,092 08		
Sundries—Inspection	11,463 18		
Sundries—Weighing	3,712 75		
			726,927 98
Surplus		$	359,767 61
(Q) APPEAL BOARD—			
Receipts—Appeal fees—Winnipeg	8,414 75		
Appeal fees—Calgary	3,086 25		
Appeal fees—Edmonton	3,909 50		
			15,410 50
Expenditure—Salaries—Winnipeg	6,750 00		
Salaries—Calgary	4,300 00		
Salaries—Edmonton	4,400 00		
Rent—Winnipeg	526 15		
Rent—Calgary	336 36		
Rent—Edmonton	600 00		
Expenses—Winnipeg	111 81		
Expenses—Calgary	202 91		
Expenses—Edmonton	161 31		
			17,388 54
Deficit		$	1,978 04
(R) SUMMARY—WESTERN DIVISION—			
Revenue—Inspection fees	$ 922,997 71		
Weighing fees	956,946 48		
Samples sold	25,130 45		
Overtime	29,930 54		
Refund express	2,303 70		
Cargo certificates splits	377 60		
Sundries	23 80		
Registration fees	30,427 96		
License fees	31,035 00		
Appeal fees	15,410 50		
Condition reports	8,494 25		
			$2,023,077 99

STATEMENT of Revenue and Expenditure for Crop Year Ending August 31, 1929—Eastern and Western Divisions—*Continued*

WESTERN DIVISION—*Continued*

Expenditure—Inspection—Salaries	1,015,995 62		
Weighing—Salaries	547,954 56		
Inspection—Expenses	99,227 09		
Weighing—Expenses	11,376 72		
Inspection—Printing and stationery	23,590 63		
Weighing—Printing and stationery	8,478 25		
Appeal Board—Salaries	15,450 00		
Appeal Board—Expenses	1,938 54		
Appeal Board—Printing and stationery	147 40		
Registration—Salaries	17,147 30		
Registration—Expenses	2,542 44		
Registration—Printing and stationery	255 52		
Grain Research Laboratory—Salaries	25,346 78		
Grain Reserach Laboratory—Expenses	18,660 62		
Grain Research Laboratory—Capital expenditure	37,499 66		
Grain Research—Printing and stationery	1,224 75		
Western Grain Standards Board	4,490 27		
Grain Commission—Salaries	83,706 64		
Grain Commission—Expenses	18,192 40		
Grain Commission—Printing and stationery	5,088 58		
General expenses—Audit	1,000 00		
General Expenses—Sundries	6,012 52		
		1,945,326 29	
Surplus			$ 77,751 70

EASTERN DIVISION

(S) MONTREAL—			
Receipts—Inspection fees	$ 65,175 23		
Sampling fees	11,490 15		
Samples sold	600 88		
Overtime	2,272 40		
Cargo certificates splits	2,343 10		
Sundries	314 22		
		$ 82,195 98	
Expenditure—Salaries	31,403 90		
Rent	2,313 00		
Sundries	3,483 73		
Printing and stationery	1,163 01		
		38,363 64	
Surplus			$ 43,832 34
(T) TORONTO—			
Receipts—Inspection fees	606 00		
Sampling fees	273 95		
Samples sold	71 75		
Sundries	14 00		
		965 70	
Expenditure—Salaries	7,268 00		
Rent	660 00		
Sundries	340 27		
Printing and stationery	124 47		
		8,392 74	
Deficit			7,427 04

SUMMARY

MONTREAL—Surplus			$ 43,832 34
TORONTO—Deficit			7,427 04
			$ 36,405 30
Cost of Eastern Standards Board	$ 330 39		
Cost of audit	150 00		
		480 39	
Surplus			$ 35,924 91

SUMMARY—EASTERN AND WESTERN DIVISIONS

EASTERN DIVISION—Surplus	$ 35,924 91
WESTERN DIVISION—Surplus	77,751 70
Surplus	$ 113,676 61

DOMINION OF CANADA

ANNUAL REPORT

OF THE

DEPARTMENT OF THE INTERIOR

FOR THE

FISCAL YEAR ENDED MARCH 31, 1929

OTTAWA
F. A. ACLAND
PRINTER TO THE KING'S MOST EXCELLENT MAJESTY
1929

To His Excellency the Right Honourable Viscount Willingdon, G.C.S.I., G.C.M.G., G.C.I.E., G.B.E., Governor General and Commander in Chief of the Dominion of Canada.

MAY IT PLEASE YOUR EXCELLENCY:

The undersigned has the honour to lay before Your Excellency the report of the transactions of the Department of the Interior for the fiscal year ended March 31, 1929.

Respectfully submitted,

CHARLES STEWART,
Minister of the Interior.

OTTAWA, November 14, 1929.

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REPORT

OF THE

DEPARTMENT OF THE INTERIOR

1928-29

Hon. CHARLES STEWART,
Minister of the Interior,
Ottawa.

SIR,—I have the honour to submit the fifty-sixth Annual Report of the Department of the Interior for the fiscal year ended March 31, 1929.

The statements and statistics which follow summarize the results of a fiscal period marked by the continuation of the same healthy activity which was so much in evidence last year. The recovery of the pulp and paper industry has been especially encouraging. The industry is still faced with acute problems, but the remedial measures already effected have done much to re-establish it on a substantial foundation.

The aim of the Department of the Interior is to encourage the sound development of the natural resources of the Dominion by bringing to bear on the problem the skill of experience backed by scientific investigation. The activities are broad and cover a multitude of diverse duties. Almost every phase of the nation's life is represented in some degree.

Administrative procedure in respect to duties of such wide variety cannot be standardized, and most careful expert attention is necessary, in the case of each individual problem and resource, in order to promote wise conservation with a proper conception of the responsibilities of this generation to the future.

There has been increased activity in all branches of the mining industry. In addition to the great advance made in metal mining in Manitoba and Saskatchewan and in oil production in Alberta, there has been an unprecedented expenditure of energy and capital in the Northwest Territories. Here the aeroplane has become one of the standard means of prospecting and development in all the country from Hudson bay to the mineralized area about Great Slave lake, and from the southern territorial boundary to the Arctic islands. The development of large copper-zinc mines in northern Manitoba near the Saskatchewan boundary facilitated, as it has been, by the hydro-electric power obtained from the waterfalls of northern rivers has proceeded rapidly. Railway construction is keeping pace with mining expansion.

To meet adequately the greatly augmented demands the Supervisory Mining Engineer's staff has been reorganized and increased in numbers, especially the field force. It became apparent early in the year that just as a new situation had necessitated revised gas and petroleum regulations, so new regulations governing the development of quartz mining would have to be framed as speedily as possible. With this end in view a careful study was made that these regulations might be based on the most accurate information and up-to-date practice.

The proven oil-producing area of Western Canada has been extended considerably during the year and in consequence operators have been encouraged to increase their exploratory efforts. The expense involved is large since the

geological formation necessitates deeper drilling than in some other fields. The Turner valley has received most attention since it is the locality of the greatest producers to date but the confidence which has been created and the greater accumulation of knowledge regarding the structural geology of local formations are encouraging interest in Wainwright and other fields. The production of oil in Western Canada rose considerably during the fiscal year, reaching a record total of 531,724 barrels, more than 173,000 barrels greater than the output during 1927-28. The Oil Division of the Supervisory Mining Engineer's Office is engaged in a special study to promote in every way the conservation and development of oil and gas.

The Dominion Forest Service co-ordinates and encourages general forest conservation and forest research throughout Canada in addition to protecting federal timber lands from destruction by fire and managing, on a sustained yield basis, the forest reserves in Manitoba, Saskatchewan, Alberta, and the area under Dominion control in British Columbia.

Acting under your instructions the officers of the department are studying the question of the possibility of a definite stock-taking of Canada's forest resources. The importance of the industry need not be further stressed than to point out that during the past five years the average annual exports of forest products were valued at $276,000,000, a sum exceeded only by that of exports of agricultural products.

During the fiscal year 1928-29 the fire situation on federal timber lands, owing to a greater fire hazard due to exceedingly unfavourable weather conditions, was very much worse than during the previous fiscal year. The number of fires detected was 1,571 as compared with 661 in 1927-28. Notwithstanding this great increase in the number of fires the increased efficiency of the fire-detection and fire-fighting organization was evidenced by the fact that relatively few of the fires attained large size and the total damage sustained was $768,758 as compared with $824,376 in the previous year.

The national forests in the Prairie Provinces continue to supply in somewhat increasing quantities the timber requirements of local sawmills and other neighbourhood industries. The tendency is towards smaller mills, with lower overhead charges, which are capable of utilizing the poorer material with the better, and are designed to supply the local requirements of relatively small districts.

Campers and holiday-makers are using the national forests in greater numbers than ever and, so long as the regulations which it has been found necessary to apply in the public interest are observed, every encouragement is given to visitors to use the forests as recreational resorts.

The policy of distributing broad-leaved and coniferous seedlings and cuttings to settlers in the West has been a potent factor in beautifying the farms and making it possible not only to raise garden and orchard produce of a varied nature for the home but also to increase the production of the farm itself. These are influences which have contributed to a greater contentment and happiness in farm life.

Besides these direct efforts, research and silvicultural investigations of a high technical standard are carried on by the Forest Service, including problems affecting timber owners and the wood-using industries, which are continually presented to the service for solution. The scientific aspect of utilization problems is dealt with in the Forest Products Laboratories which the department has established in Ottawa, Vancouver, and Montreal, and which work hand-in-hand with the wood-using industries.

Water-power matters have received much attention during the year. In the laying down of a hydro-electric system it is necessary to look well ahead of present needs, and make plans for recording and linking-up all possible water-

power resources so that they may be developed systematically and wisely in the national interest. In the Middle West this duty devolves wholly upon the Water Power and Reclamation Service of this department. In the rest of Canada the department co-operates with the water-power authorities of the provinces to which the hydro-power resources appertain.

The original impulse given to water-power development in Canada depended largely on the solving of the problems of economic long-distance transmission of electricity between the years 1890 and 1900. The result of this is seen in the rapid advance which has taken place since that time. In 1900 the total installation was approximately 170,000 horse-power, but by the close of 1910 it had reached 975,000 horse-power. By 1920 the figures had jumped to 2,508,000 horse-power and at January 1, 1929, the total installation throughout Canada was 5,349,232 horse-power, or about 12½ per cent of the combined commercial capacities of those power sites at present recorded.

A further impulse to development is discernable in the still greater increase in efficiency of transmission which has been brought about since 1927. An outstanding illustration of this is the 230-mile line from the Gatineau river in Quebec supplying power to the Ontario Hydro-Electric Power Commission at Toronto. This transmission system is designed to carry 250,000 horse-power at 220,000 volts, about double the maximum transmission voltage of a few years ago.

This advance into higher voltages for the economic transmission of electric power, combined with the many new uses which are constantly being found for electricity, points to accelerated growth in the water-power field for many years to come.

Questions concerning the joint waters of Canada and the United States are, with the passing of each year, assuming greater importance and, since the Minister of the Interior is called upon to advise on these international water questions it has been necessary to give expert study to the technical and legal features involved.

The work of the National Parks Branch has steadily progressed. In the earlier years of the history of national parks, from 1885 onward, the people of Canada were, on the whole, inclined to view them without much enthusiasm—perhaps as the only practical use to which large areas of mountainous country could possibly be put. Yet it was the early perseverance of the department in developing a broad national parks system that gave encouragement to a tourist traffic which since the war has grown immensely in importance. To-day a very different public sentiment is manifest and the national parks are regarded as a perpetual source of spiritual and material wealth.

A few figures will suffice to show the growth of the work of the National Parks Branch since its inception: In 1911 the number of such parks was 8, with a total area of 4,019 square miles; to-day the number is 18, and the total area 12,336 square miles. In the eighteen-year interval the revenues have increased between four and five times and are now approaching a quarter of a million dollars. There are now constructed and maintained by the National Parks Branch 400 miles of motor roads and 2,000 miles of trails, whereas in 1911, there were no motor roads and the figure for trail mileage was 225. There are at present 810 miles of telephone line maintained principally for fire-prevention purposes. The growth of townsites at such centres as Banff, Jasper, and Waterton has necessitated the construction of muhicipal improvements and there are now 14 miles of streets, 11 miles of sidewalks, 19 miles of water mains, and 9 miles of sewer mains maintained by the department.

During the fiscal year the total number of all visitors to the parks was 488,600, an increase of nearly 36 per cent as compared with 1927-28. The total expenditures of all the tourists from abroad visiting Canada during the year has

been officially computed to be $250,501,000, and of this amount those attracted by the beauty of the parks accounted for a substantial part.

The growth of the townsites as social and holiday centres has encouraged the effort to preserve the picturesque and colourful aspects of native and national customs. At these places festivals and carnivals are regularly held which have proved a great attraction to visitors.

Prince Albert national park was set aside towards the close of the previous fiscal year but was not opened to the public until August, 1928. The Prime Minister, the Rt. Hon. W. L. Mackenzie King, made the dedicatory address, in the presence of an enthusiastic concourse of over three thousand people.

The conservation of historic sites and monuments of national importance throughout Canada is carried on along with the parks' administration. Among the sites acquired during the past year was that of the great fortress of Louisburg which was set aside as a national historic park. This is one of the most outstanding landmarks in Canadian history.

Still another important phase of the work of the branch is the protection of wild life. The national parks act as reserves and sanctuaries for the preservation of native species and incidentally as breeding grounds for restocking adjacent sections of the country, thereby preventing the serious depletion of game, and fur-bearers.

The administration of the immense region north of the organized provinces is being directed well ahead of present requirements. Actually this is a much richer country than is generally thought in such resources as minerals, waterpowers, and fish. Furs have since the earliest times been the mainstay of the trade of the area, and mining has, for thirty years, been associated with the Yukon, but prospecting is to-day active in a vast area between Chesterfield inlet and Great Slave lake by mining companies financially well supported.

Primitive transportation (largely limited to waterways craft in summer and dog trains in winter) has in the past been the great drawback to the opening up of the country. This difficulty is now being overcome by the practical efficiency of the aeroplane, and communication by radio and air mail is bringing about a real cohesion between these northern areas and the rest of Canada. The department has always been impressed with the necessity of preserving in the highest state of well-being the human resources of this region—the native Indian and Eskimo population—not only from humanitarian reasons but also because, as is becoming increasingly evident, these natives will furnish invaluable assistance in opening up the material resources. This conception is the central idea in the administration of the territories, through the North West Territories and Yukon Branch. It was for this purpose that, during the past year expeditions and patrols both by sea and land were carried out, native game preserves set aside, game laws amended, increased medical services provided, and an extended investigation made as to the possibility of establishing a domesticated reindeer industry on a large scale.

The administration of the Northwest Game Act at present provides the main source of revenue. There was a reduction in the yield of the main varieties of furs, except muskrat, for 1927-28—the latest year for which returns are complete—but this was to be expected in view of the less satisfactory conditions of the hunting season.

The destruction of predatory animals is being still further encouraged, under the method found satisfactory in dealing with wolves, by placing a bounty on coyotes. A wolf bounty has been in force for several years; before 1925-26 it was $20 per head, the pelt being retained by the hunter. In that year it was increased to $30, conditional upon the pelt being turned over to the department. This change has resulted in a greatly increased destruction of wolves, while at the same time the department receives from season to season almost enough

from the sale of the pelts to meet the cost of the bounty. In the last few years coyotes have become increasingly troublesome and a bounty of $20 per head is offered for their destruction on the same terms as the wolf bounty.

In addition to the work of administering federal lands and resources the Department of the Interior has an important responsibility to discharge in seeing that the country's development opportunities are brought to the attention of capital and enterprise both at home and abroad. This is the function of the Natural Resources Intelligence Service. To this end this service has built up an efficient index of current information on all phases of development. Specially trained research workers study individual problems and the results are published in bulletins which go out to all who are interested, either as promoters, actual operators, or investors. A special development during the past fiscal year has been the following up of this work to include thorough investigations into the ways and means by which specific primary products now being produced in the Dominion can be made to serve more widely as raw materials for more advanced manufacturing enterprise, and thus enlarge and diversify the whole fabric of Canadian industry. Not only has systematic investigatory work been carried out at Ottawa, but municipal organizations, boards of trade, and chambers of commerce in different parts of Canada, east and west, have been assisted and as a result new industries have been established and others projected. The success of these undertakings has been substantial.

As regards tourist travel every effort is being made to direct the attention of the travelling public both at home and abroad to Canada's recreational resources in scenery, climate, good roads, game, and wild life. In this effort there is being received the co-operation of provincial and municipal authorities and of national and local organizations. In the municipal field this frequently takes the form of the development of the landscape possibilities of the locality to the aesthetic and material benefit of the community. There has been a progressive increase in foreign tourist traffic in Canada since official figures were first made available in 1920. With this increase there has come a growing realization that the tourist trade is not a small thing which touches only the fringe of our population but that it bulks up with our other great industries and affects the prosperity of the whole nation. Important as the trade now is, there is evidence that it is only in its infancy and the department is sparing no pains to promote its growth throughout the Dominion.

The publication and distribution of geographic, economic, and tourist maps, of diagrams, bulletins, and other informative material, an important function of this service, has been carried on with increased activity.

All branches of survey work carried on by this department are co-ordinated under the Surveys Bureau, in charge of the Director General of Surveys.

The Geodetic Survey since its inception in 1905 has been gradually extending triangulation and precise levelling across Canada and is now carrying these operations into some of the more northern parts of the country which have within the last few years begun to develop so rapidly. By means of these operations a basis or framework is being laid down to which all other surveys whether federal, provincial, municipal, or private can be referred. Major problems in geodetic research and triangulation adjustment also receive attention.

The Topographical Survey completed during the year new mapping covering over fourteen thousand square miles throughout Canada. In aerial surveying a total of over sixty-five thousand square miles was photographed, in co-operation with the Royal Canadian Air Force. Land classification surveys were carried on in Manitoba and Saskatchewan and over one thousand measurements of the true direction of the compass needle were taken in conjunction with other work.

The International Boundary Commission recleared the boundary vista and repaired monuments on the section between the lake of the Woods and Red river and also on the portion separating Maine and Quebec. Two boundary range marks were located at Point Roberts, British Columbia. Fourteen boundary maps were printed and issued during the year.

The Government maintains two observatories—the Dominion Observatory at Ottawa and the Dominion Astrophysical Observatory at Victoria, British Columbia. At each a very full program of observations was carried out. The time service maintained by the observatory at Ottawa in co-operation with Greenwich, Washington, and Paris is remarkable for accuracy. Investigations connected with solar physics, and the relation of the sun to weather conditions were conducted, and the studies and interpretations of earthquakes and tremors made, have a special economic significance in certain parts of Canada where large developments of a permanent character are under way. The activities of the Victoria observatory were chiefly concerned with the physical structure of stellar bodies and its relation to the problems of the constitution of matter.

In the work of the Dominion Lands Administration the amendment to the regulations which enabled the securing of second homesteads by those who had fulfilled the duties required on first homesteads, resulted in a large number of second entries being made and the opening up of a considerable area of new country. The new regulations permitting the renewal of grazing leases for a further period of twenty-one years, in pastoral districts, has proved a popular one, and the adjustment of seed-grain and fodder loans has resulted in the removal of sources of irritation and hardship. The new plan of holding sales of cancelled school lands early each spring has been welcomed by both settlers and municipal officers.

There was a growth of nearly 125 per cent in the number of homestead entries as compared with the previous year and the revenue from this source increased in the same period from $72,221 to $161,540. The revenues collected by the Mining Lands Division on account of fees, rentals and royalties for mineral rights have been the largest for the last eight years. Receipts on account of school lands held in trust for the provinces of Manitoba, Saskatchewan, and Alberta showed an increase of over 25 per cent compared with the previous fiscal year. The receipts derived from the sale and lease of ordnance lands, while relatively small in bulk, showed the highest percentage of increase (over 74 per cent) of any branch of the departmental revenues, and the departmental revenues as a whole showed increased receipts of well over one million dollars as compared with the year 1927-28.

Outlines of the work of the several branches of the department follow.

Dominion Lands Administration

Lands Patents

Letters Patent.—The number of letters patent issued during the fiscal year was 6,015, covering a total area of 945,204 acres, made up by provinces as follows:—

Province	Patents	Acres
Manitoba	559	72,555
Saskatchewan	3,159	537,613
Alberta	1,996	308,701
British Columbia	292	26,322
Yukon Territory	6	11
Northwest Territories	3	2
Totals	6,015	945,204

Homestead Entries.—Sixteen thousand one hundred and fifty-seven (16,157) homestead entries were granted during the year, aggregating an approximate area of 2,585,120 acres, being an increase of 8,924 in the number of homesteads granted as compared with the previous year.

By provinces the entries were made up as follows: Manitoba, 643; Saskatchewan, 5,808; Alberta, 8,933; British Columbia, 773; total, 16,157.

There were 742 soldier grant entries made during the year, aggregating an approximate area of 118,720 acres, made up by provinces as follows:—

Province	Number of entries	Acres
Manitoba	28	4,480
Saskatchewan	249	39,840
Alberta	413	66,080
British Columbia (Railway Belt and Peace River Block)	52	8,320
Totals	742	118,720

There were 4,691 second homestead entries made during the year, aggregating approximately 750,560 acres, made up by provinces as follows:—

	Number of entries	Acres
Manitoba	116	18,560
Saskatchewan	1,950	312,000
Alberta	2,466	394,560
British Columbia (Railway Belt and Peace River Block)	159	25,440
Totals	4,691	750,560

Refunds.—The total value of improvements on cancelled homesteads in connection with which there were 541 refunds, was $31,912.05.

School Lands

During the fiscal year ended March 31, 1929, school lands were disposed of by public auction and private sales in the provinces of Manitoba, Saskatchewan and Alberta as follows:—

Province	Area in acres	Value	Average per acre
Manitoba	12·14	$ 96 98	$ 7 99
Saskatchewan	357,411·870	4,608,151 44	12 89
Alberta	299,393·334	4,286,319 66	14 32

The approximate net areas disposed of to March 31, 1929, after making deductions for cancelled sales and adjustments in regard to changes in area, were as follows:—

Province	Area in acres	Value	Average per acre	Value of town lots
Manitoba	633,932·855	$ 6,075,293 83	$ 9 58	$ 5,240 00
Saskatchewan	1,771,554·561	28,243,520 02	15 94	12,646 00
Alberta	1,222,613·744	17,498,827 54	14 31	39,415 00

The revenues collected for the fiscal year (less principal moneys and less expenditures) and paid over to the provinces were as follows: Manitoba, $20,776.24; Saskatchewan, $352,330.08; Alberta, $331,527.82.

The amounts of interest paid in the fiscal year on the investments to the three provinces were as follows: Manitoba, $293,412.50; Saskatchewan, $788,-150; Alberta, $423,687.50.

Mining Lands

There was increased activity with regard to the disposal of mining rights, the property of the Crown in the right of the Dominion. This is indicated by the increase in the revenue of the Mining Lands Division from $837,075.07 to $1,053,581.68. The main sources of revenue for the past year have been rentals

and fees in connection with petroleum and natural gas leases, and there has been increased revenue from royalty on coal and in connection with quartz-mining claims.

The completion of the railway line in northern Manitoba, to the Flin Flon mine, which is now being continued to the Sherritt Gordon mine, has speeded up the development of prospects already found and has been the cause of extending prospecting operations to more distant points. The operators of the Flin Flon mine are developing a water power at Island falls, and the smelter being erected is to be capable of treating the ores and concentrates from other mines. Unless all signs fail, Manitoba will, in a short period of time, be one of the principal metal producing provinces.

There was greater activity last year in mining in the Yukon Territory, and the output of placer gold, and of silver and lead has increased.

During the year the department found it necessary to amend the mining regulations relating to petroleum and natural gas in order to provide for the issue of prospecting permits, and to rescind the old Quartz Mining Regulations and provide new regulations which follow, to some extent, those of Ontario and Quebec.

Timber and Grazing Lands

The decrease in revenue from timber, grazing and hay lands was $3,586.66 as compared with the previous year. In 1927-28 the sum of $105,000 was received as bonus on three berths sold at auction, and while there is a decrease of over $67,000 in bonus account, there is an increase of about $60,000 covering other items. The comparative statement of revenue shows a growth from $569,607 in 1918 to $1,386,391 in 1929, an increase of about $817,000, which is nearly one hundred and forty-five per cent.

With regard to the areas affected, timber berths cover 6,369 square miles and grazing leaseholds 7,199,891 acres, as against 6,466 square miles and 6,727,015 acres, respectively, for the fiscal year 1927-28; and although the timber berths show a small decreased area of 98 square miles, the area under lease has increased by 472,876 acres. Some 80 more berths were granted, and 855 operated during the fiscal year out of a total of 1,412 berths.

There were decreases in regard to the quantity of timber manufactured, and one decrease is particularly noticeable, viz., that of over 50,000 cords of pulpwood. Owing to operations having exceeded the requirements of the mills, cutting has been somewhat suspended until the over-supply has been absorbed. This, however, is only temporary, and it is expected that cutting during the coming season will show an appreciable increase. Owing to recent mining activity in northern Manitoba, there will be good opportunities for settlers to secure a living by providing the necessary timber.

The grazing business is steadily increasing, as seen by the larger acreage and revenue, and, on the whole, this division has had a good year, payments being made quite as promptly as in other years.

Ordnance, Admiralty and Public Lands

In the reorganization of the Dominion Lands Administration certain work has been combined with that formerly undertaken in the Ordnance, Admiralty and Railway Lands Branch. The work of the new division—the Ordnance, Admiralty and Public Lands Division—now includes, in addition to ordnance and admiralty lands, administration of Dominion lands required by railways for various purposes; lands for fur farming; fractional and accrued areas; roadways and rights of way; sites for schools, churches and a variety of other purposes; townsites and settlements; escheat lands and other public lands.

Continued progress has been made in following out the policy of placing all available ordnance and admiralty parcels under lease as far as possible, and a number of new leases have been recorded.

An arrangement has been consummated between the Department of Railways and Canals and the Department of the Interior with regard to their respective areas of jurisdiction over Rideau Canal lands, and it is expected that this will result in the further development of these canal lands.

A decided effort is being made to close out the several matters requiring attention between the department and various railway companies in respect to right-of-way and subsidy lands. Some of these matters have been pending for many years but it is expected, in view of the efforts being made, that they will be pressed to a conclusion before long.

There has been a marked increase in the number of applications received for lands required for various purposes.

Supervisory Mining Engineer

Mining operations for metals, coal, petroleum and natural gas showed substantial progress during the year both as regards extent and in the matter of returns. Great activity has prevailed in the prospecting for minerals in northern Manitoba and Saskatchewan and the Northwest Territories, and development work which has already commenced on the important ore bodies already located, received a great impetus from the laying of steel and the imminent completion of the railway from The Pas northward.

The amount of coal mined in Alberta increased from 6,936,780 tons to 7,334,179 tons, and the number of mines operating showed an increase of twenty-five. Operating mines in Saskatchewan reported an output of 467,131 tons or a decrease of 5,000 tons compared with 1927-28. There were ten fewer mines operating.

The activities of petroleum and natural gas operators in the western provinces have met with a substantial degree of success, culminating in the bringing in of two spectacular wells which extended the area of big wet gas production in Turner valley some three miles southeastwards. The choice of centres of drilling activity in the new area has been influenced in part by the results of the detailed geological investigations that have been carried on in recent years. In addition very extensive operations were conducted for the determination of geological structures by means of core and other drilling, under permits to prospect for petroleum and natural gas. During the fiscal year nearly 40,000 feet of drilling under this category was carried out, while of major drilling, no less than 192,978 feet was recorded. The production of all grades of naphtha and crude oil reached the record figure of 531,724 barrels, an increase of over forty-eight per cent over the previous year, and the consumption of natural gas from all sources rose to 14,198,959 thousands of cubic feet, an increase of over a billion and a half cubic feet during the same period.

The transfer of the Office of the Supervisory Mining Engineer to Ottawa was successfully made and a sub-office opened at The Pas to maintain close relations with the metal-mining industry in Manitoba and Saskatchewan and provide an efficient inspection of the operations in progress. The staff of the newly created office was kept busy on inspections of the great numbers of claims staked, and was able to afford much assistance to prospectors in the location of their claims. To meet the needs of the rapid growth in mining activity, the Quartz Mining Regulations were revised. The revised regulations are effective from April 1, 1929.

National Parks

The steady development in the use of the national parks continues to be a source of satisfaction. The number of visitors this year has been greater than ever before. Over 200,000 people went to the Banff park alone or more than the travel to all parks a few years ago, while total travel to the parks during the fiscal year was approximately 489,000. This increased use has naturally made heavier demands upon all the facilities connected with the parks, especially upon the highways, as the greatest increase of traffic is by automobile. In view of the expansion of this form of travel everywhere on the continent, during the past few years the parks administration has devoted a great deal of its energies to the carrying out of an active road-building program. At the present time not only have all roads within the parks been put into satisfactory condition but trunk roads traversing five of the main parks in the Rockies have been built which now form, or ultimately will, part of through highways from the prairies to the Pacific coast. These roads will cross the main Rockies by four different passes—the Akamina highway, in Waterton Lakes park, by Akamina pass; the Banff-Windermere highway, traversing Banff and Kootenay parks, by Vermilion pass; the Kicking Horse Trail, from Lake Louise to Leanchoil, by Kicking Horse pass; and the Athabaska highway, now completed in Jasper park from Jasper to the foot-hills, by the Yellowhead pass. The provincial roads linking up with the park sections are not in every instance completed. When they are, Canada will offer a unique choice of scenic highways leading to the national parks, which will, no doubt, attract motorists in still greater numbers.

The most important event of the year was the formal opening of the new Prince Albert park in northern Saskatchewan. Early in the year the department began the construction of a new motor road leading to Waskesiu lake, the laying out of a campsite, and the provision of other necessary facilities. On August 10 the area was publicly dedicated to the people by the Rt. Hon. Mackenzie King, Premier of Canada, and the gates were thrown open to visitors. The wide interest shown in this park by people from all parts of the Prairie Provinces indicates that it will fill a genuine need and be an important addition to the recreational life of the West.

A large open-air swimming-pool and attractive bathing-house were completed in Kootenay park in time for the opening of the season in connection with the Sinclair radium hot springs. These springs are specially high in radio-active properties and the provision of modern bathing facilities has added greatly to the attractions of the park and to the enjoyment of motorists travelling by the Banff-Windermere highway. Over 21,000 bathers used the pool during the season, at times so greatly taxing its accommodation that the decision was reached to extend it an additional thirty feet, giving the pool a total length of one hundred and ten feet.

Waterton Lakes park had again a record year. A through bus service now connects this park with Many Glaciers, Glacier park, Montana, and also with Banff, while a boat service also provides connections with the United States park by water. The improvement in the connecting provincial roads has greatly facilitated access to the park and the reserve may confidently be expected to become one of the most popular of the national resorts.

Work was commenced on the construction of a sewerage system in Jasper townsite.

The topographical survey of Banff and Jasper parks was again carried on by members of the Topographical Surveys Branch of the department. The survey of Banff park was completed and good progress made with the survey of Jasper park. This work will supply the data upon which accurate maps may be based, and in addition details about many of the outlying regions concerning

which little is known. An examination was also made of the northern and eastern areas of both parks with a view to a possible rearrangement of boundaries.

The increasing appreciation of the value of national parks is leading to demands for the establishment of additional parks throughout Canada. During the year an investigation was carried out of two alternative areas suggested in Manitoba and the reports concerning these are now before the department and under consideration.

The marking and preserving of national historic sites has made excellent progress. To date over 800 sites have been reviewed by the Historic Sites Board and officers of the National Parks Branch. Of these 221 have been selected for commemoration and 129 memorials have been erected. The preservation of these sites serves to keep green the romantic background of Canadian history and adds greatly to the interest of travellers in all parts of the Dominion. During the year the land was acquired surrounding the remains of the famous old fortress of Louisburg and in the near future a national historic park will be created there.

Additional protection to bird life was provided under the Migratory Birds Convention Act. Closed seasons were established for certain species and a change made in the open seasons in different parts of the country with respect to others. The serious losses to bird life through the dumping of oil from vessels in navigable waters received the attention of the department and following a conference in Washington a Draft Convention was prepared for submission to the Governments of Great Britain and the United States. A vigorous campaign of education was carried out with respect to the regulations of the Migratory Birds Convention Act.

Forestry

The importance attached by leading forest authorities of the Empire to the management of Canada's forests in relation to the timber supply of the Empire was given emphasis during the year at the Third British Empire Forestry Conference held in Australia and New Zealand in August, September and October. The fact was impressed upon all that the Empire has an adequate supply of hardwoods, but that a shortage of softwoods is definitely approaching; that Canada is the Empire's "softwood storehouse" and that the duty and opportunity of Canada in this connection are therefore readily seen. The Canadian delegation was headed by Mr. E. H. Finlayson, Director of Forestry, and Mr. D. Roy Cameron, Associate Director of Forestry, also attended. The conference was given an excellent insight into the problems of Australasian forestry and an opportunity was presented to discuss these and other forestry problems with leading foresters from all over the Empire.

The revenue of the Forest Service for the year shows an increase of $22,429. This is made up to some extent of increases in the proceeds from hay, grazing, special uses and miscellaneous revenue, but chiefly of greater returns from timber sales, notwithstanding a decrease in the returns from non-competitive timber permits. The net increase in revenue and in number of timber sales is due largely to the introduction of supervisors' sales which permit of the disposal of small quantities of timber with a minimum of delay.

In grazing, Saskatchewan shows a temporary recession, but British Columbia reports progress, while Manitoba and Alberta remain much the same as for some years past.

The forest fire situation, except in British Columbia, where an exceptionally favourable season was experienced, was the cause of much concern to the officers of the service. In Manitoba, the season was one of the worst ever experienced, and in Saskatchewan the fire season was the longest in ten years

In Alberta too, the fire hazard was unusually severe and prolonged. Improved organization with better equipment and training of fire-fighting forces, however, kept down fire losses. A striking feature of the year's work in fire protection has been the occurrence of forest fires in November and December—an occurrence unprecedented in the experience of this department. The use of aircraft in fire protection has enabled operations to be started earlier, and air patrols now begin in March. The object of these air patrols is to extinguish trappers' winter camp-fires, which left unextinguished smoulder in the duff under the snow and when dry weather comes in spring frequently cause serious conflagrations. Aircraft are also used in the transportation of rangers and their supplies to the more distant posts.

The national forests are gaining a place of ever-increasing importance in both the work and the play of the communities adjacent to them. Through the timber they furnish, obtained and utilized under the system of sales and permits, the forests supply material for many local industries and farms; they also afford very considerable grazing areas which are taken advantage of by the local farmers and other stock owners, and so the forests influence the industrial and agricultural life of these communities. Even more striking is the part the forests play in affording opportunity for healthful rest and recreation to the people in their vicinity; to some of the larger resorts indeed, visitors come long distances, even from remote parts of the United States.

In the field of forest research the year was marked by the inauguration of silvicultural research in the province of Nova Scotia, the work being initiated on farmers' woodlots. Work in other eastern provinces is being followed up, and in the western provinces the matter of simplifying the method of determining forest types is being investigated. Research work at the Indian Head and Sutherland forest nurseries is being extended. Experimental work is being continued in seeding and planting on the national forests, and some definite results are being obtained. The preparation of a book of form-class volume tables, including tables of conversion factors derived from piled cords of pulpwood, has been completed and will shortly be printed. This will be of great value to officials and executives of pulp-mills, sawmills, and other industries dealing with wood in its primary stage of manufacture.

Forest surveys were carried on in Saskatchewan and Manitoba.

The crop of seed produced on forest trees during the summer of 1928 was a poor one; hence the quantities collected were smaller.

In spite of the bad fire season which occupied most of the time of the rangers it was found possible to carry on considerable improvement work.

In the work of forest-products research, the year marked a vigorous resumption of work in the eastern forest products laboratories, subsequent to the removal of the pulp and paper laboratory to its new quarters in Montreal and of the main laboratories to their new location in Ottawa. The Vancouver laboratory has acquired enlarged equipment and is extending its work; an important feature of this laboratory's work has been the classes in kiln-drying, at which many operators of kilns were pupils.

Canadian Forest Week (April 22 to 28 inclusive) coincided with the special week of publicity held by the United States forest authorities, and was featured by an exchange of speakers between the two countries. Newspaper advertising was extended, and the lecture service to boys' and girls' summer camps continued. New cabins for forestry publicity purposes were built in the exhibition grounds at Brandon and Saskatoon.

The summer of 1928 was generally favourable for tree plantations and for work at the forest nurseries. The number of applicants for forest trees showed an increase of 777 over the previous year. Over 7,100,000 trees were distributed in 1928.

Water Power and Reclamation

International Waterway Matters.—The Government has charged the Minister of the Interior with the responsibility of advising it with respect to international waterway problems. This responsibility is growing year by year and the Dominion Water Power and Reclamation Service is called upon to devote more and more time to these matters. In Section IV of the last annual report a brief outline was given of the many problems and in Section V of this report the activities of the past year in this regard are given in some detail so that any extended reference is unnecessary here, but it is of interest to note that a Convention and Protocol between Canada and the United States giving effect to the recommendations of the Special International Niagara Board in regard to remedial measures at Niagara Falls was signed on January 2, 1929, and is now before the legislative bodies of the two countries for ratification. Among new matters arising was the joint reference to the International Joint Commission of a drainage and flooding problem arising in regard to the Roseau river which rises in the state of Minnesota and flows into Manitoba.

Water-Power.—The outstanding feature of the past year was the intense activity in water-power development in the Prairie Provinces. Interim licences were issued for the Ghost site on the Bow river in Alberta, for the Island Falls site on the Churchill river in Saskatchewan, and for the Seven Sisters site on the Winnipeg river in Manitoba; these sites have an ultimate designed capacity of 345,000 horse-power. Negotiations were also begun for an interim licence for the Slave Falls site on the Winnipeg river. In the Dominion, as a whole, hydro development showed increasing activity, over 550,000 horse-power of new turbine installation being placed in operation. The total installation has now reached 5,350,000 horse-power which, it is estimated, represents nearly $12\frac{1}{2}$ per cent of the ultimate capacity of the water-power sites at present recorded in Canada. The construction of new plants now in progress indicates that the steady increase in utilization of our water-power resources will be maintained for some time to come.

Irrigation.—Two succeeding years of above-normal precipitation have been experienced in southern Alberta and the demand for irrigation in 1928 was again unusually light. However, a dry spring with slight run-off created a considerable temporary demand which subsided during the heavy rainfall in June and July.

In eight large irrigation projects operating in Alberta a total area of 543,000 acres was cropped in 1928 and crops grown therein were valued at $11,127,000. It is noticeable that although the number of applications for individual water rights has decreased recently, due to two wet years, the acreage under cultivation in the larger projects is increasing steadily.

Wheat is still the leading crop in all projects but a diversified type of farming is coming into favour and each year the area devoted to more specialized crops, such as sugar beets, is materially increasing.

Drainage.—As in the past, the drainage investigations carried out by the Dominion Water Power and Reclamation Service during the year have been confined largely to surveys and inspections of small schemes. One hundred and eleven schemes of this nature were investigated. Investigations and surveys were also made of schemes for reclamation and flood prevention in connection with the East and West Prairie rivers in northern Alberta, the Icelandic river in northern Manitoba, and the Seine river in southern Manitoba. Surveys for additional ditches for the Low Water Lake drainage scheme were made. Supervision was maintained over the Western project of the Manitoba Dairy Farms Limited and the McArthur Land Company's drainage project in Manitoba and the Waterhen Lake drainage project in Saskatchewan. The investigation of the Eastern drainage project of the Manitoba Dairy Farms Limited in Manitoba

was completed by the investigating engineers. Several provincial drainage districts were organized in Alberta and Saskatchewan and considerable progress was made in the development of the drainage districts previously organized. Sales of Dominion lands reclaimed in these drainage districts were made to the provinces affected. Six hundred and three applications for the use of water areas for fur-farming purposes were dealt with.

North West Territories and Yukon

Northwest Territories.—The Northwest Territories Council held two sessions and dealt with a large number of routine matters and also gave assent to legislation providing for greater protection to human lives from dogs running at large within the settlements. Proposed amendments to the Northwest Territories Act and the Northwest Game Act were reviewed and recommended for the consideration of the Minister of the Interior. Appreciation of the valuable services rendered by the late John Wesley Greenway while a member of the Council was recorded by a suitable resolution and a copy forwarded to the surviving relatives. Dr. Duncan Campbell Scott, Deputy Superintendent General of Indian Affairs, was appointed by the Governor General to fill the vacancy.

The Chief Inspector conducted a special field investigation and took evidence regarding the many and varied conditions existing in the Mackenzie District and the Western Arctic.

The annual expedition to the Eastern Arctic on the ss. *Beothic,* despite difficult ice conditions, successfully accomplished its work in about seven weeks. The branch is conducting many explorations and investigations into Canada's hinterland, including the Arctic islands. The living conditions of the Eskimo are being given particular attention.

Investigations are in progress in regard to the fauna of southwestern Baffin island and concerning conditions in the Thelon game sanctuary, especially in reference to the musk-ox. An examination was made of certain areas in the Mackenzie valley with a view to ascertaining the probabilities for successful reindeer grazing. The country examined showed sufficient grazing for 550,000 head of reindeer.

The revenue derived from the administration of the Northwest Game Act was $51,141.04—an increase of $7,659.08 over last year.

The branch's engineering staff compiled the data for the latest edition of the Northwest Territories map, issued in 1929; drafted plans and specifications for the medical officers' quarters at Aklavik, Coppermine, and Chesterfield, and for power boats for the Mackenzie River delta; prepared plans, maps, and sketches to illustrate various features of the growing importance of the Northwest Territories.

*Yukon.**—The Yukon Territory again justified its reputation as being a paradise for big-game hunters and tourists. Many hunters who visited the country were well satisfied with the results of their trips. A favourable season resulted in large crops of agricultural produce of good grade. The general health of the residents was excellent.

The administrative details were conducted satisfactorily, and a number of amendments were made to existing ordinances.

Observatories

Dominion Observatory, Ottawa

Observations on the regular meridian program were obtained on 128 days, comprising 2,164 measurements of right ascension and declination of program and azimuth stars, 40 of planets, and 123 of the sun; also 911 measurements of

* Mining in the Yukon is dealt with in the report of the Commissioner of Dominion Lands (Mining Lands Division), Section I of this report.

nadir and other constants. The time service, comprising 4 primary clocks, 15 secondary clocks, 600 minute dials, 18 seconds dials, 2 tower clocks and various relays, chronographs and seismograph shutters, was maintained as usual; in addition 204 clocks, watches, and other time-pieces were overhauled for other government branches and departments. Wireless time signals were received throughout the year from the United States, England, Germany, and France. Time signals were sent out twice daily, through the local broadcasting station, and directly from the observatory on short wave-lengths. Experimental work was done on an automatic recorder for field receiving sets, and on the use of radio tubes and light sensitive cells for clock work, seismograph recording, and similar purposes. The equipment of the clock vault was completed and the two Riefler primary clocks mounted. A new Synchronome clock has also been ordered.

With the eighty-foot reflecting telescope and the twenty-three-foot spectrograph 300 observations, each containing 9 strips of spectrum of solar limbs, centre, midway, and comparison lines, were photographed. Sun-spots were recorded on 91 direct photographs of the solar disk with reference lines. About 525 spectrograms were measured and 640 computations made of radial velocity and heliographic positions. The graduated sphere with position circle and co-ordinate frame for reading heliographic latitudes and longitudes was completed. Photographs of four sections of spruce trees, secured from the Lower Ottawa Forest Protective Association, were made and the annual rings measured on a measuring engine; the annual growths were found to be in accord with sun-spot variations, showing a mean increase in growth of more than twenty per cent during maximum sun-spot activity.

The 15-inch equatorial was employed in the further study of Cepheid variables. With the spectrograph attachment 239 spectrograms were obtained, mostly of η Aquilae, δ Cephei, ζ Geminorum, and ε Aurigae. The latter, an eclipsing variable, was subjected to a special study of several months duration, during the period of its present eclipse, a phenomenon occurring only every 26 years. The spectrograms were reduced to radial velocities, and, in collaboration with McGill University, investigations were continued on the variation of ionization in Cepheid variables. Considerable spectroscopic work was also carried on in determination of radial velocities of pseudo-Cepheid super-giant stars. With the photo-electric photometer attachment 56 observations were made of the variables under spectroscopic observation and of ε Aurigae. As usual the equatorial telescope was available on Saturday nights for observation by the public.

Work was continued on the co-operative scheme for the observing of short-period variables. The observations for standard comparison stars were practically completed and charts and lists of stars for eighteen fields were made, containing in all over three hundred and fifty comparison stars. Observations were continued on Cepheid fields for the determination of light curves. A program including twenty-seven Cepheids was prepared and issued to other observatories and over one hundred plates of these fields were made with the triple-camera equipment.

During the year 307 earthquakes were recorded, of which 32 were reported to the press and, by telegraph, to Science Service, Washington. The most outstanding tremors originated in Bulgaria and in Peru. There was also pronounced activity in the bed of the Pacific ocean off the coast of Mexico and Central America, no less than ten quakes of a severe character having been located there during the year. The co-operative work in Quebec is progressing favourably. Records at two stations have been regularly obtained throughout the year.

The *Bibliographical Bulletin*, compiled and edited at the observatory, was issued regularly throughout the year.

Observations for the determination of the three magnetic elements, declination, inclination, and horizontal intensity, were made at eight repeat stations and three new stations in the area between longitudes 71° W. and 82° W. and latitudes 45° N. and 50° N. Six others were occupied in the region of Hudson strait, declination, inclination, and total intensity by Lloyd's method being observed at Port Burwell, Resolution Island, Cape Hopes Advance (2 stations), Wakeham Bay, and Nottingham Island stations. Office work has included the computation of observations of the past season, and the completion of a publication covering the results of the period 1924-1926.

Gravity determinations were made at Ottawa, Greenwich, Potsdam, and Washington to obtain an intercontinental comparison of adopted standard values of gravity, and for adequate interpretation of research for about 115 gravity stations established throughout Canada. Concurrent with these determinations investigations were made, in collaboration with the Department of Mines, Ottawa, of modern European methods of geophysical prospecting. In this connection, visits were made by Mr. A. H. Miller of this observatory to the Geodetic Institute, Potsdam; the Geological Survey of Prussia, Berlin; the Baron Roland Eötvös Institute, Budapest; the Dutch Shell Oil Company, The Hague; and several British institutions, including the Geological Survey of Great Britain, to whose director the observatory is indebted for much assistance in the investigations.

Two of the regular series of Dominion Observatory publications were issued and distributed, Vol. 8, No. 9, *The Castor System*, and Vol. 9, No. 5, *Eta Aquilae*. Three others were completed and sent to press for printing. A considerable number of papers were presented to scientific societies and published in various journals; numerous scientific lectures were given, and lantern slides and material loaned for lectures by amateur astronomers.

Dominion Astrophysical Observatory, Victoria, B.C.

This is the eleventh annual report of the work of this institution, which commenced actual observations on May 6, 1918. The details of the work carried on are published in complete form in the publications of the observatory, of which seven were issued during the year. Three more are in press.

As in previous years, the whole time of the telescope, except two hours for visitors every Saturday evening, was devoted to photographing stellar spectra. The observing weather was somewhat better than the average for the preceding ten years as a total of 1346·4 hours observing was secured for stellar work as against a ten-year average of 1236·7 hours. The number of spectra secured was 1,317 as against a ten-year average of 1,590, but it must be remembered that there are now more long-exposure spectra than formerly. In particular one observer took 46 nights to obtain 93 plates. Spectra were secured on 214 nights as against the ten-year average of 204. Of these nights 123 might be classed as fair to good when five or more plates were secured; the total on such nights amounted to 1,116 plates. Poorer nights numbered 91, with a total of 201 plates.

The program of observation of the B-type stars, which has been under way for about five years, is now approaching completion. Practically all the plates required have now been secured and over 500 spectrograms of these stars were measured during the year. Some stars formerly classified as B were found to be of O-type. With those previously observed at this observatory there are now about 460 O and B-type stars whose velocities have been determined solely at this institution. Several plates each of 180 other B-stars, previously observed at other places, have been made and combined with the previous observations to give a mean result for the radial velocity. Considerable computation in

connection with the proper motion data of these stars has been carried out and their galactic co-ordinates and distances to the solar apex have been deduced. It is planned to use the results for determining anew the solar motion, the mean distances and absolute magnitudes of the various spectral classes of the B-stars and for a more thorough investigation of the rotation of the galaxy referred to in the last report.

The spectra of over 1,000 A-type stars have now been secured. The number of plates of each star varies widely and in the winter section of the sky where these stars are most numerous and the weather the poorest, many of the stars are represented by a single plate. Much remains to be done in the winter season but it is hoped that another year will see the program nearing completion. Nearly 500 of these A-type spectra have been measured during the year and, as is the case in the B-program also, measurement practically keeps pace with observation.

The orbits of four new spectroscopic binaries have been determined during the year. These are of A Persei, Boss 4177, H.R. 7338 and H.D. 32990. The massive star Y Cygni has been re-observed, the earlier spectrograms remeasured and a new determination made of the orbital elements. A revision has been effected in the orbital elements for Boss 809 which results in much better agreement with the observations. Several other binaries are under investigation, some of long period being followed at intervals for possible changes of period.

The wave-lengths of the oxygen and nitrogen lines between 3800 and 4700 on third order grating plates have been measured. An investigation has been undertaken of all the Wolf-Rayet stars visible at Victoria. The data obtained have been studied with a view to determining the causes of broad band emission and also for the purpose of formulating a system of classification for these stars.

New programs for observing have been prepared. One deals with the faint and distant K-type stars in the galactic regions for which spectra are now being secured and measured. The results will be used in a further study of the galactic rotation. A similar use will be made of spectra of the so-called "c" stars as it is hoped to secure observations of all those not previously observed for radial velocity. Another program has recently been commenced of 500 O-B5 stars fainter than magnitude 7·5 and north of the equator and is a continuation of the program of B stars brighter than magnitude 7·5 now completed.

During the year a six-inch finder to which a photographic adapter was added has been attached to the large telescope. The shorter focal length of this as compared to the seven-inch finder makes it easier to pick up the fainter stars now becoming more frequent on our programs. Piers on which to place the small equatorial and sun-dial were constructed during the year.

Many noted astronomers from all over the world have visited the observatory of late. Including day visitors, approximately 35,000 persons visited the institution during the year.

Surveys Bureau

The aerial surveys and investigations carried on by the department have grown in importance, owing chiefly to the opening up of northern areas. These surveys are under the immediate supervision of the Topographical Survey, which branch also records, in a central photographic library, aerial photographs taken by other government departments.

Recognizing the important part which maps must play in the development of the resources of the country, the mapping program of the Topographical Survey was pushed forward energetically, and substantial progress was made in the preparation of the National Topographic Series in the various provinces. In all some 14,000 square miles were covered during the season. In connection with this mapping program, control surveys properly monumented were laid down on the various districts and numerous astronomic observations were taken. These control surveys provide accurately located points to which local surveys

may be tied and thus co-ordinated. Considerable progress was made in the art of mapping from aerial photographs, thus enabling some difficult areas to be mapped quickly and accurately.

Triangulation of the Geodetic Survey was extended from New Brunswick across the bay of Chaleur into Quebec, in the mining areas of northern Quebec and Ontario, in Alberta and Saskatchewan between Edmonton and Prince Albert, and in British Columbia between Smithers and Quesnel. Precise levelling was carried on in Quebec, Ontario, and British Columbia and progress was made in the preparation of the results of precise levelling, for publication in convenient form.

The International Boundary Commission continued its work of maintaining in a state of effective demarcation the 5,500 miles of boundary between Canada and the United States. In addition to other work of maintenance the Commission erected two marks at Point Roberts to range, for the benefit of fishermen, the first eleven-mile course of the boundary in the strait of Georgia.

The Town Planning Division has been continuing its work of distributing information, and carrying on an educational campaign.

Natural Resources Intelligence Service

In the main, the work of this service during the past year proceeded along established lines. One phase of this work, however, has more recently developed in such a manner as to warrant special mention. The type of work in question has to do with the initiation and the direction of industrial surveys.

Co-operation with Boards of Trade.—An industrial survey may be briefly defined as a stock-taking of a community for the purpose of ascertaining what it has to offer to industries in the way of manufacturing advantages. Its primary purpose is to set out, in orderly sequence, the natural resources of the community, its accessible markets, raw material supplies, the situation as regards power and fuel, the availability of various kinds of labour, together with adequate descriptions of its transportation and communication facilities, and the other features pertinent to the community's economic progress and prospects.

In engaging in this field of investigation, the major motive and interest of the Natural Resources Intelligence Service is to further the development of the Dominion's natural resources. Among its other activities the service has for a considerable period been giving special attention toward analyzing the possibilities of utilizing primary and waste products of domestic origin for the manufacture of commodities now or formerly imported. As a means of uncovering additional possibilities and stimulating a nation-wide local interest in constructive industrial investigation the service has undertaken a wider co-operation with boards of trade and other similarly constituted bodies in studying the requirements of their respective districts and in analyzing the possibilities of further development of resources and industry. The system adopted by the service, which is meeting with the general approval of the co-operating bodies, primarily consists of directing, within the local boards of trade, the formation of strong industrial committees, representative of the industrial, commercial, professional, and civic interests of the districts, and of advising them fully in regard to the organization and the execution of the survey. When organization is completed, the service places at the further disposal of the boards its technical and professional personnel for direction and advice in the field collection and office compilation, correlation and analysis of the survey data.

While each community presents its own individual problems, the following are some of the principal subjects concerning which all details are normally covered in an industrial survey: natural resources; present industrial and commercial development; labour; power; transportation, water,

gas, and fuel supply; housing conditions; cost of living; industrial sites; assessment and taxation; legislation affecting industry; industrial inducements; banking and communication facilities; and municipal services of all kinds. It is apparent that the work of making such a survey requires well-organized and scientifically-directed effort if it is to be successfully completed in a reasonable length of time. For some years this work has received steadily increasing attention by this service, including practically the full time of several technical officers. General surveys were first carried out in southwestern Ontario in co-operation with the boards of trade in that area to ascertain the raw material requirements of the established industries, and to discover openings for new industries based on local resources, district requirements, and advantages. At the request of the Border Chamber of Commerce, a comprehensive industrial survey was made of the Border Cities district, comprising Windsor, Walkerville, Ford City, Riverside, Tecumseh, Sandwich, Ojibway, and La Salle, by one of the technical officers of this service. Subsequently, an exhaustive report was prepared, embodying a complete analysis of the established manufacturing industries, and an exposition of the possibilities of developing new industries based upon information obtained through the survey. It also contained a compilation and digest of district features and facilities of interest to the prospective manufacturer or resident.

The concrete benefits which accrued to the Border Cities Chamber of Commerce as a result of the survey of that district prompted the department to extend its co-operative facilities to other boards of trade wishing to undertake similar scientific surveys of their districts. The experience gained by the Natural Resources Intelligence Service in its earlier work along these lines enabled it to formulate and adopt the policy, in regard to industrial surveys, to which reference has been made, whereby its facilities could be used to full advantage without incurring any heavy expense either to the community or to the department. The knowledge that such a policy had been adopted awakened active interest in Western Canada and resulted in requests from a number of representative boards of trade for the assistance of the service in the organization and execution of industrial surveys of their districts. It is becoming increasingly apparent that the industrial survey is of fundamental value as a practical agency by which the industrial possibilities of Canadian communities can be scientifically investigated. It affords a systematic method of fact-finding together with a convenient means of obtaining the well-considered opinions and suggestions of responsible business men in regard to possible industrial opportunities. In addition to the local value of these surveys each constitutes a step in a nation-wide study of Canadian development.

General Information Work.—The many inquiries concerning Canada's natural resources and their development that this service receives make it imperative that all useful data on such subjects be carefully assembled and classified, and, as in past years, considerable time was devoted to collecting, classifying and recording such information. This is done through index systems which make it possible for the staff to obtain, immediately, complete and up-to-date information on any resource or industry. Many inquiries, however, are of such nature as to require special research, including the preparation of maps, charts, and reports. Such investigations made during the past year covered: the possibility of establishing a plant in Vancouver to manufacture cordage, rope, and twine; the production of chlorine, caustic soda, and bleaching powder in British Columbia; the use of ling livers for making a medicinal oil; the manufacture of stains, lacquers, etc., for furniture; the possibility of manufacturing aeroplane parts in Ontario; a study of raw materials for the manufacture of glass bottles in Eastern Canada, etc. In addition to these special investigations, reports and industrial maps were prepared as time permitted. During the period under review the following were compiled and distributed: mimeographed reports

on the fish by-products industry, and the natural resources of the Chibougamau district of Quebec. Industrial maps issued covered the cooperage plants, the pulp and paper machinery manufactures, and the fertilizer factories. In this investigatory work close co-operation was maintained with other branches of the public service.

In connection with the settlement and development of available lands, and the making known of the opportunities that Canada offers in this field, the service, as usual, carried on a wide range of information activity. This included the issuing of land maps, economic reports, cereal, elevation, physical and climatic, vegetation and forest cover, and transportation maps. While the furnishing of these maps and reports sufficed to cover inquiries of the ordinary type, many prospective settlers and investors requested information regarding various phases of land settlement that could be adequately covered only by considerable special study.

The growing interest in the various aspects of Canada's fur industry was evidenced during the past year by the increased number of inquiries received. These included requests for information regarding prices, markets, pelting, trapping locations, regulations, royalties, bounties, etc., as well as the raising of fur bearers in captivity. Fur farming has now become recognized as an important supplementary source of fur supply, and the propagation of fur-bearing animals in captivity and the problems it involves have become subjects of ever-widening interest. This has caused heavy demand for the service's monographs on the domestication of fur bearers, and a number of such monographs were revised and brought up to date.

Tourist Information.—Tourist travel, now recognized as a major economic influence on account of its value to Canada both in revenue and in the opportunities it affords for the widespread advertising of both the recreational and the commercial resources of the Dominion, continues to expand from year to year. The great popularity enjoyed by the whole Dominion as a vacation land, and the consequent increase in the number of tourists coming into the country from practically every part of the United States and from the more distant countries, have created a strong demand both through the mail and by personal inquiries for information regarding our recreational attractions—where they are, how best reached, and best enjoyed. It has likewise necessitated greater activity on the part of the service in order to place itself in a position to satisfy this demand efficiently and to help prospective visitors in planning their motoring, hunting, fishing, canoeing, camping, and 'hiking' trips in Canada. Many inquiries were received from persons interested in pack-trail trips and, to facilitate the work of dealing with these in addition to furnishing copies of road maps and tourist literature to individual inquirers, quantity lots were supplied to auto clubs, travel bureaus, chambers of commerce, and boards of trade of various cities in the United States. These organizations were in a position to place the material where it would be of most value in calling attention to Canada's tourist attractions. The booklet *Vacations in Canada* was revised and a new edition printed. Articles dealing with Canada's attractions as a holiday land were prepared at the request of the editors for publication in various Canadian and United States periodicals.

Distribution of Publications.—During the year 323,659 maps and 366,550 reports, booklets and folders were distributed. Although Canadian distribution was by no means neglected this material was for the greater part placed in carefully selected channels abroad. The service was successful in obtaining reproduction and reviews of road maps in fifty-two of the leading newspapers and magazines in the United States with a total circulation of more than 5,000,000. In order to facilitate efficient distribution of tourist and recreational literature, a tourist inquiry card was prepared and supplied in quantities to all tourist

bureaus, automobile clubs and kindred organizations throughout the United States. Physical and climatic as well as geographic maps prepared in this service were utilized by flyers on a trip from Oklahoma to Alaska, and one of the leading northern exploration companies was furnished with copies of all existing maps published by the various departments to establish a map reference library in each of the branch offices operated by the company. Specially mounted maps were furnished the New England Sportsman's Show for display purposes and suitable booklets provided for distribution. Libraries in the new steamships placed on the Canadian National route to the West Indies were equipped with sets of reports regarding Canada, and participants in a Dominion and International oratorical contests were supplied with published data on Canada's natural resources.

Special Canadian News Service.—During the year a weekly Canadian newsletter was issued, in both English and French, for distribution abroad, giving the latest information on the development of natural resources and industries throughout Canada. This newsletter, comprising an average of ten pages of carefully selected and closely condensed news, has a broad distribution to all countries of the world, and is much in demand by Canadian trade commissioners, newspapers and periodicals, libraries, chambers of commerce, banks, investment houses, railway representatives, and commercial interests. The items appearing in the letter are circulated widely in the British Isles by the High Commissioner's office in London. The Canadian legations in Paris, Washington and Tokio, and elsewhere the trade commissioner's offices are likewise among the most important avenues of distribution. In addition to the newsletter, Canadian newspapers and radio broadcasting stations were regularly furnished with and made extensive use of material of similar type and interest. In connection with this work every effort was made to accede to specific requests for articles and for illustrations in the form of halftones, linecuts, and photographs.

Geographic and Economic Mapping.—The work of the Chief Geographer's Office showed considerable progress in the geographic mapping of Canada. New editions of the land district maps were issued, one for each of the nine districts. Two new sheets of the Standard Geographic Map were published—La Tuque and Mont Laurier—on a scale 1:250,000, and fourteen other sheets were revised and brought up to date and new editions published, viz: Timiskaming, Toronto, Ottawa, London, Kingston, Cartier, and Hamilton, on a scale of 1:250,000; and Montreal-Quebec, Lake Nipigon, Nipissing, Tadoussac, New Brunswick, Hearst, and English River, on a scale of 1:500,000. Considerable work was done on the preparation of other sheets of the Standard Geographic Map. Diagrams were also prepared for lecture purposes. Maps of Quebec-Maritime Provinces; Ontario; Manitoba, Saskatchewan, and Alberta; and British Columbia were published on a scale of 35 miles to the inch, as well as a relief map of the Dominion on a scale of 60 miles to the inch.

An extensive program in economic geography, mapping, and related research was actively pursued during the year. A number of economic maps covering a wide range of development subjects were prepared and published, such as: the Tourist Road Map of Canada and United States; Tourist Road Sectional Map —Atlantic, Great Lakes, Middle West and Pacific sheets; maps of Nova Scotia, New Brunswick, and Prince Edward Island, indicating motor roads and recreational resources; Western Land Map; Homestead Map of Northern Alberta and Saskatchewan; map of Central Canada featuring commercial development; similar map of Manitoba and part of Saskatchewan; industrial maps of the Border Cities; industrial maps of Canada indicating various industries such as woollen cloth and yarn plants, ranching and dairying areas in relation to meat packing plants, pulp and paper mills, etc. Apart from the maps issued by the

service itself, assistance of one form or another was rendered to nearly three hundred industrial, financial, and educational publishers. Material prepared for such purposes included maps showing natural and geographic divisions, political divisions and main Canadian railways; population, water-powers, chief winds, and annual rainfall; chief commercial fishing waters, forest areas, and pulp and paper mills; main types of farming; mineral resources and value of output; the northern trend of development; orography, isotherms, and rainfall. The economic information prepared for these various organizations was made use of extensively by newspapers and other publications in Canada, the United States, and Great Britain.

Another most important phase of the work embraced continued co-operation with other federal and provincial departments, as for example in the preparation of maps for the Immigration Department, for the Dominion Fuel Board, and for the Departments of Trade and Commerce and of Agriculture.

Technical Plant.—During the year the Technical Plant, equipped as it is with photographic laboratories, blue printing, photostat, mimeograph and other facilities, experienced a very active year. The utility of the plant was again attested not only by the economies effected but likewise by the volume of work performed for other departments of the federal Government in addition to that required by the Department of the Interior. The photographic library was used continually by authors, publishers, and others seeking Canadian photographs for reproduction. Although no appropriation is available for the purchase of photographs this library is being constantly improved through the co-operation of various boards of trade and other organizations. The number of photographs furnished to authors, publishers and educational centres during the year was 8,603. The lantern slide service has made good progress during the past year and several of the lantern slide lectures have been revised. The number of lectures delivered during the year, based on the use of the lantern slide lecture sets, was 1,736, and the attendance at the lectures 130,200, exclusive of those at miscellaneous showings for which no reports were received.

DISPOSITION OF THE SURVEYED AREAS IN MANITOBA, SASKATCHEWAN AND ALBERTA, JANUARY 1, 1929

Items	Manitoba	Saskatchewan	Alberta	Total
	acres	acres	acres	acres
Area under homestead (including military homesteads)	8,375,000	29,620,840	20,065,460	58,061,300
Area under pre-emptions, purchased homesteads, sales, half-breed scrip, bounty grants, special grants, swamp lands transferred to province of Manitoba, etc.	5,845,500	6,758,574	3,574,740	16,178,804
Area granted to railway companies	3,553,833	15,169,775	13,031,731	31,755,339
Area granted to Hudson's Bay Company	1,273,500	3,351,160	2,402,780	7,027,440
Area of school land endowment (one-eighteenth of area surveyed in sections)	1,637,800	3,944,400	3,760,500	9,342,700
Area sold subject to reclamation by drainage	41,066	41,441	39,057	121,564
Area sold under irrigation system		44,712	274,359	319,071
Area under timber berths (leased)	1,405,824	551,744	1,036,137	2,993,705
Area under grazing leases	76,105	3,464,512	3,235,927	6,776,544
Area of forest reserves and parks	2,488,500	6,553,000	17,072,100	26,113,600
Area reserved for forestry, park and pulpwood purposes (inside surveyed tract)	2,453,000	1,637,000	798,000	4,888,000
Area of road allowances	977,302	1,468,830	1,288,882	3,735,014
Area of parish and river lots	529,087	84,589	121,221	734,897
Area of Indian reserves	482,229	1,193,451	1,342,417	3,018,097
Area of Indian reserves surrendered	77,072	369,481	328,917	775,470
Area of water-covered lands (inside surveyed tract)	4,260,280	1,899,590	2,296,648	8,456,518
Area undisposed of (surveyed)	3,900,000	3,000,000	14,872,000	21,772,000
Totals	37,376,098	79,153,099	85,640,866	202,070,063

STATEMENT OF LANDS SALES BY RAILWAY COMPANIES HAVING GOVERNMENT LAND GRANTS AND BY THE HUDSON'S BAY COMPANY

Year	Hudson's Bay Company		Canadian Pacific Railway Company		Manitoba South-western Colonization Railway Company		Qu'Appelle, Long Lake and Saskatchewan Railroad and Steamboat Company	
	acres	amount	acres	amount	acres	amount	acres	amount
		$		$		$		$
1893	.....	.....	93,184	295,288	14,164	57,559	1,603	.....
1894	7,526	48,225	43,155	131,628	6,312	280,003	640	.....
1895	4,341	23,209	55,453	176,950	5,623	22,330	2,391	.....
1896	9,299	52,410	66,624	220,360	21,254	88,568	286	.....
1897	10,784	53,277	135,681	431,095	63,800	634,644	2,524	.....
1898	62,000	310,000	242,135	757,792	106,473	363,982	22,534	.....
1899	56,875	274,625	261,832	814,857	58,019	199,558	61,030	178,517
1900	70,196	352,631	379,091	1,152,836	133,507	437,449	18,932	53,974
1901	82,308	399,804	339,985	1,046,665	59,749	214,953	22,266	74,810
1902	269,577	1,412,332	1,362,478	4,440,500	206,411	713,365	39,835	147,365
1903	330,046	1,939,804	2,260,722	8,472,250	250,372	699,210	843,900	1,476,900
1904	144,857	879,910	857,474	3,516,864	29,522	113,303	.....	.....
1905	139,721	865,905	411,451	2,045,800	80,342	296,936	.....	.....
1906	236,191	1,863,375	1,012,322	6,015,060	83,418	360,889	.....	.....
1907*	69,158	742,221	851,083	4,817,682	3,051	22,645	1,353	16,789
1908	21,184	267,215	81,060	727,367	31,982	153,007	5,621	68,869
1909	25,449	288,836	29,331	383,390	10,396	84,845	37,662	380,371
1910	104,382	1,297,454	655,585	10,473,425	14,501	126,950	106,000	964,600
1911	267,038	3,747,768	715,095	10,372,661	20,313	284,859	113,533	1,237,204
1912	42,554	808,943	855,280	12,420,488	18,932	117,497	35,213	495,116
1913	53,581	1,128,806	447,158	6,348,352	2,768	48,639	15,395	255,399
1914	26,292	572,837	263,962	4,242,089	7,626	91,948	1,629	21,546
1915	16,400	306,550	151,262	2,496,872	489	5,508	1,292	19,118
1916	79,310	1,273,144	242,215	3,670,421	4,780	58,808	12,246	180,361
1917	254,941	4,234,244	405,764	6,612,040	12,470	165,245	21,533	331,596
1918	386,394	6,914,947	545,284	11,044,883	25,933	321,005	49,723	783,062
1919	285,561	4,978,950	602,555	10,580,669	5,289	67,214	33,838	527,670
1920	276,629	4,724,941	571,571	11,356,146	4,623	56,760	32,095	474,895
1921	178,301	3,037,369	275,636	5,898,994	1,518	20,058	11,432	160,472
1922	33,595	545,611	101,497	1,732,350	1,519	15,497	1,274	22,315
1923	24,976	366,257	83,485	1,248,968	373	5,107	1,122	17,000
1924	33,434	456,386	45,911	775,205	637	3,822	6,242	92,145
1925	84,758	1,117,618	91,295	1,602,524	1,701	13,890	1,925	28,571
1926	184,595	2,276,129	168,988	2,263,919	3,723	31,043	7,623	115,603
1927	282,670	3,414,539	249,497	2,979,958	3,695	27,043	9,985	142,968
1928	289,713	3,546,598	387,034	4,349,779	4,910	46,256	7,888	93,833
1929	289,903	3,349,574	447,594	4,902,593	8,266	61,134	5,393	73,201
Totals	4,734,629	57,872,444	15,789,730	150,818,665	1,308,461	5,659,429	1,535,958	8,434,270

*Nine months to March 31.

STATEMENT OF LANDS SALES BY RAILWAY COMPANIES HAVING GOVERNMENT LAND GRANTS AND BY THE HUDSON'S BAY COMPANY—*Concluded*

Year	Calgary and Edmonton Railway Company		Canadian Northern Railway Company		Great Northwest Central Railway Company		Total		Average per acre for all Railways
	acres	amount	acres	amount	acres	amount	acres	amount	
		$		$		$		$	$
1893....	11,260	.....	.....	.....	.....	.....	120,211	352,847	2 93
1894....	11,035	.....	.....	.....	.....	.....	68,668	207,856	3 02
1895....	46,815	.....	.....	.....	.....	.....	114,713	222,489	1 94
1896....	10,553	.....	.....	.....	.....	.....	108,016	361,338	3 34
1897....	9,436	.....	.....	.....	.....	.....	222,225	719,016	3 23
1898....	15,481	.....	.....	.....	.....	.....	448,623	1,431,774	3 18
1899....	24,738	53,335	.....	.....	.....	.....	462,494	1,520,792	3 28
1900....	46,653	128,256	.....	.....	.....	.....	648,379	2,125,146	3 27
1901....	116,719	352,037	.....	.....	.....	.....	621,027	2,088,269	3 36
1902....	323,494	1,033,396	.....	.....	.....	.....	2,201,795	7,746,958	3 56
1903....	231,800	909,600	183,736	631,503	128,435	522,490	4,229,011	14,651,757	3 46
1904....	129,007	563,507	64,469	313,575	41,858	177,081	1,267,187	5,564,240	4 39
1905....	109,191	512,898	231,707	1,221,469	17,593	103,564	990,005	5,046,572	5 09
1906....	85,784	480,063	204,966	1,014,351	20,003	137,503	1,642,684	9,871,241	6 01
1907*...	59,515	346,064	289,576	1,711,109	4,023	41,470	1,237,759	7,697,930	6 02
1908....	8,606	75,644	196,946	1,746,504	1,294	13,855	346,693	3,052,461	8 80
1909....	6,370	66,508	.....	.....	165	7,935	109,373	2,211,885	11 08
1910....	18,323	182,926	285,428	2,783,010	571	6,863	1,184,790	15,835,228	13 36
1911....	11,820	116,231	277,414	3,336,797	1,438	27,417	1,406,651	19,122,937	13 59
1912....	10,853	154,424	365,926	4,216,578	632	11,373	1,329,390	18,224,419	13 70
1913....	4,155	44,212	182,491	2,009,642	1,601	32,105	707,149	9,867,155	13 95
1914....	19,575	460,129	182,491	2,009,642	.....	.....	501,575	7,398,191	14 75
1915....	23,042	444,018	.....	.....	316	6,956	192,801	3,279,031	17 01
1916....	11,689	172,033	.....	.....	4,646	81,182	354,886	5,435,949	15 32
1917....	33,821	573,875	17,796	298,938	8,829	141,439	755,154	12,357,377	16 35
1918....	53,335	815,628	39,546	732,351	16,021	275,724	1,116,237	20,887,600	18 71
1919....	31,774	479,496	65,110	1,261,963	14,530	252,774	1,038,657	18,148,736	17 47
1920....	26,953	425,656	86,305	1,685,241	27,981	464,586	1,026,157	19,188,225	18 69
1921....	11,681	191,928	69,934	1,455,319	5,128	96,616	553,630	10,860,756	19 61
1922....	3,024	51,603	14,163	263,199	167	2,997	155,239	2,633,572	16 96
1923....	1,013	15,552	11,214	190,112	1,120	21,368	123,303	1,864,364	15 12
1924....	1,283	14,144	71,489	1,103,421	799	14,934	159,795	2,460,057	15 39
1925....	8,499	132,504	56,981	770,680	2,246	35,151	247,405	3,700,938	14 95
1926....	10,145	93,642	79,088	1,127,973	3,660	45,907	457,822	5,954,216	13 01
1927....	8,658	96,799	107,511	1,586,850	4,463	47,531	666,479	8,295,685	12 45
1928....	17,162	205,695	67,714	924,018	9,183	93,582	783,604	9,259,759	11 82
1929....	17,628	199,975	83,507	1,189,833	7,478	82,378	859,769	9,858,688	11 46
Totals..	1,570,890	9,391,778	3,235,508	33,584,078	324,180	2,744,790	28,499,356	268,505,454	9 42

*Nine months to March 31.

ACCOUNTS BRANCH

STATEMENT of Gross Cash Receipts from all Sources for the Fiscal Year 1928-29 Compared with the Receipts for the Previous Fiscal Year

Source of revenue	1928–29	1927–28	Increase	Decrease	Net increase
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Dominion lands	4,152,279 31	3,762,928 56	389,350 75	.....	
School lands	2,661,392 34	2,085,300 76	576,091 58	.....	
Ordnance lands	24,858 19	14,221 02	10,637 17	.....	
Seed grain and relief	423,801 75	313,193 83	110,607 92	.....	
Registrar's fees	553 49	350 79	202 70	.....	
Fines and forfeitures	3,539 93	3,622 98	.....	83 05	
Casual revenue	21,665 53	14,378 32	7,287 21	.....	
Totals	7,288,090 54	6,193,996 26	1,094,177 33	83 05	1,094,094 28

STATEMENT of Cash Receipts on Account of Dominion Lands Revenue for the Fiscal Year 1928-29 Compared with the Receipts of the Previous Fiscal Year.

Particulars	1928–1929	1927–1928	Increase	Decrease	Net increase
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Homestead fees	161,890 00	72,551 00	89,339 00		
General sales	85,905 39	91,381 39		5,476 00	
Pre-emption sales	657,211 44	597,250 13	59,961 31		
Purchased homestead sales	29,489 30	32,660 54		3,171 24	
Improvements	65,461 51	46,736 39	18,725 12		
Patent and Interchange fees	245 15	441 91		196 76	
Rentals of land	27,502 43	18,939 05	8,563 38		
Map sales, office fees, etc	30,053 15	34,467 59		4,414 44	
Suspense account	1,969 09	2,888 07		918 98	
Liquor permit fees	723 00	677 75	45 25		
Trader's licences	6,588 67	4,845 00	1,743 67		
Trapper's licences	16,127 00	14,582 00	1,545 00		
Marriage licences	2 00	2 00			
Radio fees		2 50		2 50	
Bird licences	25 00	25 00			
Fur sales	28,338 87	22,271 00	6,067 87		
Billiard licences	175 00	175 00			
Fur export tax	5 00		5 00		
Trading post licences	65 00	173 25		108 25	
Miscellaneous	9,003 66	8,707 43	296 23		
Taxidermists licences, etc	74 00	113 25		39 25	
Timber dues	1,395,725 57	1,388,140 48	7,585 09		
Grazing rental	162,548 40	150,700 26	11,848 14		
Grazing fees	8,463 20	10,344 30		1,881 10	
Grazing improvements	16,105 15	13,235 36	2,869 79		
Hay permits	9,195 62	13,449 04		4,253 42	
House rental	3,098 00	2,192 73	905 27		
Irrigation fees	537 50	412 81	124 69		
Irrigation sales	13,055 16	11,031 70	2,023 46		
Sale of trees, etc	16,927 92	18,687 62		1,759 70	
Fishing permits	1,968 30	1,598 85	369 45		
Ice permits	98 00	93 00	5 00		
Camping permits	122 00		122 00		
Rent of water-power	67,224 26	50,417 00	16,807 26		
Coal lands	421,759 95	415,532 65	6,227 30		
Mining fees	238,279 25	127,580 00	110,699 25		
Dredging leases	2,210 00	4,644 61		2,434 61	
Petroleum leases	391,855 98	298,445 99	93,409 99		
Hydraulic leases	3,988 29	1,573 89	2,414 40		
Quarrying leases	11,430 96	7,400 27	4,030 69		
Potash and alkali leases	2,031 87	1,496 19	535 68		
Tar sand leases	117 21	124 58		7 37	
Sand, stone and gravel permits	803 00	139 00	664 00		
Quartz leases	12,968 85	7,358 59	5,610 26		
Export tax on gold	16,366 79	14,205 55	2,161 24		
Free certificates for export of gold	4 50	4 50			
Antelope park	384 00	576 00		192 00	
Buffalo park	28,220 16	80,124 31		51,904 15	
Elk Island park	1,334 60	181 50	1,153 10		
Fort Anne park	6 00	11 25		5 25	
Glacier park	180 14	138 16	41 98		
Jasper park	29,942 39	32,808 22		2,865 83	
Point Pelee park	599 37	89 00	510 37		
Banff park	150,959 60	143,467 64	7,491 96		
Waterton Lakes park	5,484 08	5,883 73		399 65	
Yoho park	3,144 17	3,655 83		511 66	
Kootenay park	13,729 64	8,096 20	5,633 44		
Brereton Lakes park	10 00	20 00		10 00	
Historic sites	33 00	6 00	27 00		
Lake Florence	60 00	55 00	5 00		
Prince Albert park	379 77	36 50	343 27		
Vidals Point recreational area	72 00	80 00		8 00	
	4,152,279 31	3,762,928 56	469,910 91	80,560 16	
Refunds	81,939 94	74,333 97	7,605 97		
Net totals	4,070,339 37	3,688,594 59	462,304 94	80,560 16	381,744 78

STATEMENT Showing Receipts on Account of Dominion Lands From July 1, 1872, to March 31, 1929

Fiscal year	Homestead fees	Pre-emption fees	Improvements	Sales		Map sales, office and registration fees	Dominion Land Surveyors examination fees	Rents, survey fees, miscellaneous, and suspense account	Purchased, homestead inspection, cancellation and sundry fees	Timber dues
				Cash	Scrip					
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
1872-73	6,960 00	.....	.....	19,170 20	.....	.....	.....	.....	.....	109 25
1873-74	7,310 00	.....	.....	19,834 75	.....	.....	.....	125 50	.....	2,710 55
1874-75	11,510 00	.....	.....	13,666 90	.....	129 00	.....	.....	.....	2,335 25
1875-76	4,680 00	.....	.....	3,478 94	320 00	.....	.....	.....	.....	387 00
1876-77	2,250 00	.....	.....	1,085 86	136,955 16	4 00	.....	100 00	40 00	320 00
1877-78	14,540 00	.....	.....	2,794 86	120,159 54	.....	180 00	.....	290 00	1,620 00
1878-79	17,690 00	.....	.....	4,998 39	210,904 84	81 00	310 00	13 70	410 00	325 00
1879-80	41,255 00	10,241 43	.....	45,708 97	81,685 86	245 40	580 00	183 25	1,780 00	25,121 46
1880-81	20,450 00	10,801 75	269 00	71,170 17	70,828 30	985 40	420 00	37 58	.....	32,028 34
1881-82	54,155 00	39,843 90	1,758 00	1,240,328 27	50,590 84	3,036 45	890 00	58 10	.....	58,753 14
1882-83	73,015 00	54,725 00	7,114 91	516,092 21	33,638 40	3,109 50	890 00	501 77	.....	90,066 46
1883-84	41,580 00	28,810 00	2,596 11	424,863 36	40,919 67	1,289 55	530 00	45,766 53	1,713 45	147,983 10
1884-85	25,645 00	17,100 00	2,328 75	199,275 32	45,875 60	1,621 82	370 00	50,068 57	2,685 00	87,474 99
1885-86	26,110 00	14,371 00	1,101 50	76,140 41	214,657 97	1,339 34	360 00	20,070 00	5,025 00	64,820 31
1886-87	19,614 00	6,887 93	1,971 55	48,175 76	337,640 19	1,171 39	240 00	44,561 00	7,778 40	65,111 74
1887-88	23,691 00	4,830 00	1,918 35	52,238 36	313,522 67	1,660 75	240 00	20,591 41	12,078 53	94,964 55
1888-89	39,460 00	10,550 00	4,128 48	57,513 16	318,238 57	1,410 16	220 00	10,389 57	20,402 50	90,290 00
1889-90	35,920 00	8,580 00	3,250 54	54,896 85	228,744 47	2,099 07	190 00	3,316 23	21,715 00	84,642 95
1890-91	29,164 10	.....	6,302 61	91,664 98	171,425 14	1,854 78	88 00	7,951 05	16,790 00	102,902 71
1891-92	46,994 00	.....	6,472 31	111,651 01	97,822 41	2,147 31	135 00	29,898 49	27,964 00	106,461 35
1892-93	37,689 74	.....	7,113 50	96,171 67	77,231 18	975 20	82 00	18,509 35	22,015 50	105,865 24
1893-94	36,462 26	.....	3,497 76	53,254 71	27,840 96	973 11	.....	13,457 09	11,097 00	81,290 51
1894-95	29,664 88	.....	3,567 90	37,293 71	23,269 62	695 99	40 00	6,271 77	6,566 90	74,079 20
1895-96	18,278 00	.....	3,163 15	46,373 98	46,929 65	610 78	50 00	21,679 31	6,810 50	61,923 47
1896-97	21,179 00	.....	3,737 01	49,335 53	16,929 38	795 05	70 00	11,129 72	8,527 50	68,992 82
1897-98	34,780 00	.....	5,649 63	80,178 64	28,918 14	1,987 40	10 00	15,376 53	15,859 88	119,313 78
1898-99	58,235 00	.....	4,297 62	116,594 35	21,307 58	1,266 05	20 00	67,450 95	20,850 40	155,360 63
1899-1900	72,690 00	.....	4,835 81	103,247 58	88,756 22	1,258 85	190 00	31,154 04	21,688 00	126,345 82
1900-01	79,910 00	.....	5,213 22	40,360 93	326,270 03	3,874 14	165 00	70,499 54	12,874 00	209,399 32
1901-02	144,425 00	.....	8,481 46	66,950 21	169,767 13	5,792 96	370 00	71,993 30	663 00	207,790 90
1902-03	320,409 65	.....	11,829 08	155,537 49	158,452 66	5,911 96	365 00	125,128 66	595 00	470,916 93

1903–04	255,772 36	.....	15,119 47	196,750 15	189,705 08	5,549 13	463 50	81,246 46	1,081 00	397,344 33
1904–05	304,806 25	.....	21,571,25	154,128 04	19,644 59	4,879 13	906 50	144,854 31	1,271 00	266,951 46
1905–06	417,834 25	.....	31,795 19	442,588 69	7,654 57	6,042 34	474 00	141,345 30	1,046 25	292,684 53
1906–07 (9 months)	215,449 55	.....	39,763 63	503,202 44	11,349 89	5,449 06	420 00	60,450 99	685 00	379,476 32
1907–08	301,693 73	.....	71,139 47	656,303 03	92,311 24	7,727 29	690 00	148,914 00	1,283 50	473,608 94
1908–09	389,039 00	141,550 15	70,928 86	951,442 28	20,136 27	7,296 55	1,040 00	75,596 96	9,579 50	269,837 52
1909–10	415,232 00	174,250 00	105,009 07	1,239,037 33	9,973 84	9,135 49	1,500 00	99,967 27	14,028 30	377,856 45
1910–11	445,135 00	156,485 00	143,227 13	1,193,756 04	1,437 84	8,730 01	1,310 00	42,111 92	20,142 85	387,054 96
1911–12	391,703 12	102,070 00	184,825 92	1,967,182 85	3,256 99	11,239 14	1,400 00	44,280 89	14,745 50	400,668 61
1912–13	337,055 00	85,940 00	168,904 42	1,650,491 87	6,157 27	14,483 91	1,040 00	17,866 65	11,380 00	463,738 75
1913–14	317,412 00	61,660 00	187,052 46	1,303,587 54	240 00	16,056 07	1,350 00	40,148 65	8,402 00	378,365 33
1914–15	238,295 00	28,720 00	114,982 17	696,672 23	80 00	14,290 23	970 60	33,234 14	4,776 10	310,934 29
1915–16	170,350 00	22,760 00	112,782 70	1,090,842 36	.....	11,485 83	470 00	19,495 98	3,475 00	378,960 68
1916–17	112,110 20	14,690 00	112,711 33	2,707,203 99	332 61	13,976 95	560 00	21,212 91	2,910 00	429,403 09
1917–18	83,180 00	7,870 00	89,371 59	3,046,091 55	131 47	12,066 22	250 00	26,513 84	2,200 00	482,006 25
1918–19	42,190 00	.....	49,225 97	2,192,860 81	323 41	11,039 54	100 00	77,291 91	360 00	408,728 28
1919–20	67,460 00	.....	78,913 74	2,799,605 09	80 00	17,134 19	255 00	28,535 19	340 00	589,780 21
1920–21	53,880 00	.....	70,492 66	1,721,171 61	.....	16,333 67	200 00	23,149 23	370,00	705,313 77
1921–22	73,540 00	.....	56,084 83	761,849 89	.....	23,352 07	170 00	26,285 90	3,713 00	683,490 99
1922–23	53,460 00	.....	36,847 94	414,278 96	900 00	21,414 16	180 00	20,848 43	6,187 40	825,465 05
1923–24	38,640 00	.....	31,930 25	404,952 00	160 00	15,652 17	20 00	25,791 21	8,131 73	847,772 60
1924–25	36,590 00	.....	37,738 73	410,221 58	611 80	16,115 57	10 00	28,637 37	17,072 05	981,399 60
1925–26	46,900 00	.....	46,330 00	467,600 87	.....	19,473 96	.....	41,760 21	18,808 10	1,098,692 53
1926–27	57,700 00	.....	53,409 35	544,873 59	.....	28,744 45	.....	35,150 25	22,640 90	1,190,974 61
1927–28	72,551 00	.....	59,971 75	732,323 76	.....	34,467 59	.....	54,998 28	20,924 41	1,388,140 48
1928–29	161,890 00	.....	81,566 66	785,661 29	.....	30,053 15	.....	69,912 05	23,955,82	1,395,725 57
Totals	6,495,585 09	1,002,736 16	2,172,294 79	32,934,727 37	3,824,089 05	428,544 28	20,784 60	2,115,883 31	465,728 97	18,544,081 97

STATEMENT Showing Receipts on Account of Dominion Lands From July 1, 1872, to March 31, 1929—*Continued*

Fiscal year	Grazing lands		Hay, coal, mining fees, stone quarries, export tax on gold, etc.		National parks	Colonization lands		Gross revenue	Refunds	Net revenue
	Cash	Scrip	Cash	Scrip		Cash	Scrip			
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
1872-73								26,239 45		26,239 45
1873-74								29,980 80		29,980 80
1874-75								27,641 15		27,641 15
1875-76								8,865 94		8,865 94
1876-77								140,755 02		140,755 02
1877-78								139,584 40		139,584 40
1878-79								234,732 93		234,732 93
1879-80								206,801 37	4,636 08	202,165 29
1880-81								206,990 54	5,038 22	201,952 32
1881-82	2,245 00		40 00			354,036 17		1,805,734 87	10,687 55	1,795,047 32
1882-83	22,844 43		913 91			248,492 01		1,051,403 60	8,746 05	1,042,657 55
1883-84	11,370 60		640 90			253,713 40		1,001,776 67	9,220 50	992,556 17
1884-85	17,089 75		815 63			1,214 22		451,564 65	12,070 85	439,493 80
1885-86	29,562 51	3,131 08	1,284 83					457,973 95	63,389 12	394,584 83
1886-87	14,242 77	39,487 67	1,570 40	80 00				588,532 80	19,543 16	568,989 64
1887-88	5,922 47	23,023 28	2,273 73	80 00	2,951 58		10,000 00	569,986 68	6,277 66	563,709 02
1888-89	2,207 69	16,802 63	3,946 55		2,528 73		16,000 00	594,088 04	5,226 23	588,861 81
1889-90	1,305 57	9,021 63	9,242 08		1,094 37			464,018 76	8,209 74	455,809 02
1890-91	3,079 55	16,193 77	8,628 44	160 00	2,397 35	5 28	4,460 50	463,068 26	7,195 27	455,872 99
1891-92	3,726 80	17,222 60	5,616 85		3,648 45			459,760 58	15,291 39	444,469 19
1892-93	6,380 80	11,542 39	6,266 13		4,983 23			394,825 93	18,314 97	376,510 96
1893-94	5,740 79	7,687 86	6,243 15		2,523 92			250,069 12	4,544 01	245,525 11
1894-95	5,353 72	8,628 00	5,229 54		2,321 87			202,983 10	4,365 99	198,617 11
1895-96	7,071 86	6,255 90	5,813 51		2,734 82			227,694 93	8,368 79	219,326 14
1896-97	4,715 01	2,500 00	8,633 68		2,132 11			198,676 81	6,833 78	191,843 03
1897-98	4,728 58	510 39	699,383 01		3,045 65			1,009,741 63	4,678 55	1,005,063 08
1898-99	5,245 88		1,130,705 70		2,994 16			1,584,328 32	32,296 39	1,552,031 93
1899-1900	8,382 86	4,083 30	1,038,362 92	20 00	2,727 65			1,503,743 05	23,062 28	1,480,680 77
1900-01	4,726 28	14,671 99	1,102,127 33	20 00	4,047 31			1,874,159 09	18,368 85	1,855,790 24
1901-02	7,292 46	8,409 27	737,882 43		*2,861 13			1,432,679 25	27,165 55	1,405,513 70
1902-03	13,911 73	15,041 33	607,723 65		*5,063 69			1,890,886 83	21,519 84	1,869,366 99
1903-04	19,790 27	13,921 29	495,583 18		*9,498 48			1,681,824 70	36,721 75	1,645,102 95
1904-05	36,145 32	5,237 36	364,927 59		*14,059 55			1,339,382 35	25,786 90	1,313,595 45

1905-06	51,583 89	80 00	297,302 44	.....	18,883 83	.....	.....	1,709,315 28	33,418 36	1,675,896 92
1906-07 (9 months)	43,711 91	400 00	214,257 10	.....	*15,887 42	.....	.....	1,490,503 31	35,117 48	1,455,385 83
1907-08	43,211 78	4,048 01	266,415 31	.....	27,232 87	.....	.....	2,094,579 17	115,080 04	1,979,499 13
1908-09	53,312 79	3,257 84	253,339 17	.....	31,321 20	.....	.....	2,277,678 09	102,463 78	2,175,214 31
1909-10	67,807 01	5,081 47	459,870 29	.....	43,697 61	.....	.....	3,022,446 13	121,431 15	2,901,014 98
1910-11	60,702 80	2,356 00	774,569 27	.....	69,054 59	.....	.....	3,306 073 41	198,689 47	3,107,383 94
1911-12	69,519 41	1,520 00	729,126 56	.....	56,497 74	.....	.....	3,978,036 73	197,631 35	3,780 405 38
1912-13	79,412 76	.....	779,695 53	1,587 32	37,448 72	.....	.....	3,655,202 20	246,105 26	3,409,096 94
1913-14	84,926 15	320 00	865,499 12	.....	48,800 33	.....	.....	3,313,819 65	277,309 33	3,036,510 32
1914-15	101,710 58	400 00	1,594,905 42	.....	37,895 97	.....	.....	3,177,866 73	317,764 75	2,860,101,98
1915-16	118,955 02	160 00	476,408 82	.....	37,493 53	.....	.....	2,443,639 92	143,942 57	2,299,697 35
1916-17	128,341 50	.....	600,934 13	.....	45,851 45	.....	.....	4,190,238 16	134,243 14	4,055,995 02
1917-18	125,300 69	240 00	630,427 95	.....	52,160 52	.....	.....	4,557,810 08	113,680 44	4,444,129 64
1918-19	148,179 55	.....	630,975 74	.....	55,006 72	.....	.....	3,616,281 93	76,031 02	3,540,250 91
1919-20	183,661 96	.....	896,413 40	.....	76,742 07	.....	.....	4,738,920 85	116,249 03	4,622,671 82
1920-21	183,756 97	.....	1,234,558 49	.....	76,850 09	.....	.....	4,086,076 49	130,750 93	3,955,325 56
1921-22	144,344 67	.....	1,071,395 56	.....	74,302 68	.....	.....	2,918,529 59	119,079 58	2,799,450 01
1922-23	153,697 11	.....	823,183 50	.....	75,304 59	.....	.....	2,431,767 14	83,151 71	2,348,615 43
1923-24	141,871 05	.....	723,762 59	.....	115,163 42	.....	.....	2,353,847 02	71,983 12	2,281,863 90
1924-25	149,070 38	.....	639,749 23	.....	176,650 46	.....	.....	2,493,866 77	102,880 70	2,390,986 07
1925-26	166,387 97	.....	793,357 73	.....	180,886 12	.....	.....	2,880,197 49	76,684 27	2,803,513 22
1926-27	162,096 89	.....	1,084,694 72	.....	238,239 19	.....	.....	3,418,553 95	91,280 73	3,327,273 22
1927-28	161,044 56	.....	963,164 14	480 00	275,342 59	.....	.....	3,763,408 56	74,333 97	3,689,074 59
1928-29	171,011 60	.....	1,197,890 25	.....	234,612 92	.....	.....	4,152,279 31	81,939 94	4,070,339 37
Totals	3,036,701 70	241,235 06	24,245,751 60	2,427 32	2,172,940 68	857,461 08	30,460 50	98,591,433 53	3,468,801 59	95,122,631 94

*Including scrip.

STATEMENT Showing the Yearly Gross Cash Revenue from all Sources from April 1, 1909, to March 31, 1929

Fiscal year	Dominion lands	School lands	Seed grain	Ordnance lands	Fines and forfeitures
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
1909–10	3,007,390 82	1,292,259 95	175,152 72	189,902 48	211 00
1910–11	3,302,279 57	1,614,733 93	153,351 14	6,009 34	4,052 22
1911–12	3,973,259 74	1,594,533 96	119,634 13	11,566 46	10,510 48
1912–13	3,647,457 61	1,621,508 11	171,342 87	60,607 80	7,150 35
1913–14	3,313,259 65	1,215,822 37	176,736 89	5,805 98	7,888 50
1914–15	3,177,386 73	943,717 00	68,263 56	4,416 64	5,828 00
1915–16	2,443,479 92	934,965 37	2,525,528 50	5,997 98	3,075 21
1916–17	4,189,905 55	1,699,370 06	3,652,729 05	5,553 26	2,184 72
1917–18	4,557,438 61	2,836,216 40	2,613,708 67	7,929 75	3,686 00
1918–19	3,615,958 52	5,087,875 81	1,378,275 76	4,819 27	35 00
	35,227,816 72	18,841,002 96	11,034,723 29	302,608 96	44,621 48
1919–20	4,738,840 85	3,900,091 75	1,155,354 64	9,840 33	70 00
1920–21	4,086,076 49	4,480,270 67	773,200 67	8,887 88	1,139 75
1921–22	2,918,529 59	2,335,726 83	372,350 89	8,446 48	2,912 73
1922–23	2,430,867 14	1,538,449 98	254,802 23	6,132 79	3,075 46
1923–24	2,353,687 02	1,511,518 09	274,227 20	57,505 97	2,467 56
1924–25	2,493,254 97	1,468,627 43	298,684 22	16,474 10	3,398 86
1925–26	2,880,197 49	2,052,415 11	309,646 01	13,045,18	2,613 87
1926–27	3,418,553 95	1,567,547 79	310,807 97	30,797 07	4,592 45
1927–28	3,762,928 56	2,085,300 76	313,193 83	14,221 02	3,622 98
1928–29	4,152,279 31	2,661,392 34	423,801 75	24,858 19	3,539 93
	33,235,215 37	23,601,340 75	4,486,069 41	190,209 01	27,433 59
Increase	.....	4,760,337 79	.....	.....	.....
Decreases	1,992,601 35	.....	6,548,653 88	112,399 95	17,187 89

STATEMENT Showing the Yearly Gross Cash Revenue from all Sources from April 1, 1909, to March 31, 1929—*Concluded*

Fiscal year	Registration fees	Casual revenue	Chinese immigration revenue	Total
	$ cts.	$ cts.	$ cts.	$ cts.
1909–10	1,471 49	42,625 96	.....	4,709,014 42
1910–11	1,378 19	11,336 06	.....	5,093,140 45
1911–12	1,066 05	32,824 65	971,339 00	6,714,734 47
1912–13	1,241 25	22,873 55	3,549,242 00	9,081,423 54
1913–14	966 50	27,884 47	2,644,593 00	7,392,957 36
1914–15	969 85	11,738 10	588,124 00	4,800,443 88
1915–16	908 15	28,002 62	19,389 00	5,961,346 75
1916–17	796 85	15,618 26	140,487 00	9,706,644 75
1917–18	562 25	9,074 15	336,757 00	10,365,372 83
1918–19	789 22	12,381 71	.....	10,100,135 29
	10,149 80	214,359 53	8,249,931 00	73,925,213 74
1919–20	430 78	22,837 87	.....	9,827,466 22
1920–21	448 31	811,970 45	.....	10,161,994 22
1921–22	524 64	20,128 63	.....	5,658,619 79
1922–23	454 00	20,060 18	.....	4,253,841 78
1923–24	603 30	28,317 00	.....	4,228,326 14
1924–25	334 12	20,079 55	.....	4,300,853 25
1925–26	920 12	12,294 75	.....	5,271,132 53
1926–27	453 19	42,139 86	.....	5,374,892 28
1927–28	350 79	14,378 32	.....	6,193,996 26
1928–29	553 49	21,665 53	.....	7,288,090 54
	5,072 74	1,013,872 14	.....	62,559,213 01
Increase	.....	799,512 61	.....	.....
Decreases	5,077 06	.....	8,249,931 00	11,366,000 37

Appended hereto are individual reports of the Commissioner of Dominion Lands; the Supervisory Mining Engineer; the Director of Forestry; the Commissioner, National Parks of Canada; the Director of Water Power and Reclamation; the Director of the North West Territories and Yukon Branch; and the Director General of Surveys. The Geodetic Survey, the Topographical Survey, the Water Power and Reclamation Service, the Forest Service, and the National Parks of Canada Branch publish separate annual reports which review the work of the year in greater detail.

Your obedient servant,

W. W. CORY,
Deputy Minister.

November 1, 1929.

I

DOMINION LANDS

REPORT OF THE ACTING COMMISSIONER, J. W. MARTIN

Since the 1927-28 Annual Report of the department was submitted, the Service has suffered the loss of one of its most competent officials in the person of the late Commissioner of Dominion Lands, Mr. J. W. Greenway.

The regrettable death of Mr. Greenway occurred at a time when a long-pending reorganization of the different branches administering matters affecting Dominion lands was nearing completion. This reorganization has now been carried into effect, and the administration of Dominion lands generally, which was formerly carried on through the Dominion Lands Branch; Land Patents Branch; School Lands Branch; Ordnance, Admiralty, and Public Lands Branch; Timber and Grazing Lands Branch; and Mining Lands Branch is now under the direct control of the Commissioner of Dominion Lands.

The outstanding feature of the operations of the fiscal year, so far as Dominion lands were concerned, was the increase in the number of homestead entries. A total of 16,157 homesteads was taken up, as compared with 7,233 in the previous fiscal year, an increase of over 123 per cent. A part of this increase is accounted for by the legislation of 1928, extending the privilege of second homestead entry to settlers who had completed the duties in connection with their first homesteads by the 1st of January, 1925. The total number of second homesteads taken during the fiscal year was 4,691. This represents slightly more than one-half the increase in the number of entries.

Applications for patent were as follows:—

Number examined	7,585
New applications	3,415
Applications accepted and notifications issued	2,860
Certificates of recommendation sent out	54

In 1927 legislation was passed empowering the Governor in Council to make regulations for the apportionment and adjustment of seed grain, fodder, and relief indebtedness. Under this legislation (17 Geo. V., C. 51) the work of apportionment and adjustment has been going on, and up to the end of the fiscal period 676 reports were submitted by boards appointed for that purpose in Saskatchewan and Alberta.

The grazing industry experienced in 1928-29 one of its best years for a considerable period. The area under grazing lease is over seven million acres, being an increase of 472,876 acres as compared with the previous fiscal period. Stock returns have been furnished showing a total of over a half million head of live stock maintained on Dominion grazing leaseholds.

No public auction sales of school lands were held in Manitoba, but a large number of general sales were held in Saskatchewan and Alberta, which were highly successful both as regards the area of land sold and the prices realized.

The totals in these respects were as follows:—

	Area	Amount
Saskatchewan	357,281.47 acres	$4,606,579 56
Alberta	299,171.40 acres	4,283,502 01

During the fiscal year the revenue from the disposal of mining rights has increased considerably, particularly with regard to petroleum and natural gas. The report of the Mining Lands Division indicates that during the year twenty-six oil and gas wells were brought into commercial production on Dominion lands with a total capacity of 230,000,000 cubic feet of gas and 3,000 barrels of oil per day. Of these twenty-six wells, six produce dry gas; eleven produce wet gas and oil from gas; and the remaining nine wells produce crude petroleum.

In addition to the above, one well was brought into commercial production of dry gas on privately owned lands and six wells in respect of naphtha-laden gas. The latter wells averaged about 7,000,000 cubic feet of gas per diem with a daily output of seventy-five to one hundred barrels.

There was an increased output of silver and lead in the Yukon, but the mining of coal, of which 7,808,043 tons were produced in the Prairie Provinces, remained the principal feature of mining activities on Dominion lands.

Superintendent of Western Land Agencies

Report of Agencies

Agency	Homestead entries granted	Land sales	Applications for patent received	Land entries cancelled	Permits issued	
		Ordinary and school lands			Timber	Hay
Manitoba—						
Dauphin	338	27	145	332	443	205
*The Pas	.....	.....	.....	.....	.....	.....
Winnipeg	305	97	224	586	.....	.....
Saskatchewan—						
Moose Jaw	1,611	129	712	739	40	573
Prince Albert	4,197	101	849	1,612	1,013	968
Alberta—						
Calgary	546	59	118	342	319	106
Edmonton	3,646	118	491	1,433	2,179	653
Grande Prairie	2,268	20	159	639	642	103
Lethbridge	297	32	53	164	10	18
Peace River	2,869	14	210	991	449	193
British Columbia—						
Kamloops	23	28	85	88	397	.....
Revelstoke	20	.....	25	18	302	.....
New Westminster	55	25	40	23	228	.....

Note.—Owing to the fact that adjustments are being made from day to day (including restoration of cancelled entries and sales in some cases, and in other cases disallowance of entries reported by the various agents), these figures can only be taken as indicating approximately the business transacted at each agency.
*The Pas office is that of a Mining Recorder, who is also Sub-Agent. The returns from this office for the fiscal year were as follows: Mining locations, 5,545; assessments, 39; rentals, 183.

HOMESTEAD INSPECTORS, PRINCIPAL WORK PERFORMED BY

Headquarters	Name	Land inspections made	Applications for patent	Miles travelled	
				Wagon	Rail
Manitoba—					
Dauphin	W. S. Gordon	139	.....	8,200	6,146
"	W. J. Mayberry	334	47	7,437	831
"	G. L. Speers	438	60	3,746	10,508
Winnipeg	J. F. Drew	178	42	5,115	9,015
"	W. H. Gray	568	71	7,614	9,629
"	Wm. Lagimodiere	168	44	2,040	2,810
"	J. H. Thompson	128	.....	6,894	5,329
"	W. H. Wardrop	271	.....	7,098	5,299
"	E. A. Koons	266	.....	10,881	3,566
"	W. A. Willets	190	.....	2,171	6,409
"	Gust Mager	153	.....	5,395	3,199
"	*W. L. Jerome	247	.....	1,961	4,343
"	F. L. Morton	294	57	8,563	4,981
"	Thos. P. Williams	168	.....	3,488½	7,240
"	A. B. Jacobs	74	.....	4,053	5,205
Saskatchewan—					
Moose Jaw	C. E. Barr	867	31	9,767	830
"	N. W. Bonnell	202	.....	2,133	180
"	F. J. Bigg	1,162	16	7,988	1,051
"	J. C. deBalinhard	862	78	15,490	3,118
"	J. Furnis	701	4	8,463	504
"	F. M. Lambert	982	6	11,372	1,225
"	E. L. J. Jaycock	1,034	25	3,651	1,643
"	*H. J. Leonard	268	.....	1,952	398
"	G. H. Lydiard	1,119	23	13,183	3,381
"	T. M. Morgan	1,013	.....	15,380	1,856
"	W. A. Brown	926	37	12,179	1,019
"	*R. Wallace	346	.....	2,484	460
"	*W. G. Vicars	243	.....	2,470	1,066
"	T. A. Underwood	1,616	32	16,849	1,780
Prince Albert	*Harry Browne	67	2	755	1,308
"	H. A. Gleeson	369	31	7,341	4,245
"	A. E. Mosses	797	58	19,084	3,222
"	Fred McKenzie	569	66	7,652	2,040
"	S. Taylor	450	21	11,068	1,448
"	E. H. E. Webb-Bowen	454	52	4,342	3,669
"	W. W. Whelan	406	20	6,830	2,718
Alberta—					
Calgary	R. A. Kembry	806	16	13,406	3,343
"	D. H. Minchin	325	7	7,313	3,282
"	Jas. Nurcombe	1,431	27	11,146	4,401
"	Wm. Tempany	989	15	13,975	378
"	*J. P. McArthur	51	.....	156	355
"	H. B. Stickney	967	20	13,695	1,273
Edmonton	W. E. Bristow	156	.....	7,240	5,412
"	T. J. Cunningham	8	.....	332	.....
"	I. S. Doze	417	35	4,111	2,981
"	J. P. Duggan	488	43	3,713	2,218
"	D. A. McKay	397	.....	5,639	4,969
"	J. E. McMullen	195	9	2,496½	2,700
"	A. McMillan	358	11	14,696	3,823
"	John F. McLeod	427	4	9,104	4,587
"	F. W. Neilson	367	18	4,438	2,973
"	A. Sullivan	490	23	7,679	5,395
"	R. S. Wyllie	244	15	7,060	1,924
Grande Prairie	T. M. Newton	453	38	11,381	110
"	L. T. Smith	434	35	12,071	.....
Lethbridge	H. S. McCowan	595	9	11,667	2,316
"	D. E. Wilcox	1,145	11	12,718	752
"	H. L. Bowyer	671	10	13,638	972
Peace River	S. Grimwood	809	36	10,476	.....
"	D. S. Hayden	343	7	7,792	1,250
British Columbia—					
Kamloops	P. C. Campbell	477	.....	7,466	605
"	J. M. Benzie	509	24	5,688	6,196
"	W. R. Lowe	131	40	1,503	1,119
Revelstoke	W. E. Smith	128	16	5,583¾	4,599

*Employed for portion of year only.

REVENUES COLLECTED AT DOMINION LAND AGENCIES CLASSIFIED UNDER THE VARIOUS HEADINGS

Agency	Agent	Lands Patents Division	Timber and Grazing Lands Division	Water Power and Reclamation Service
		$ cts.	$ cts.	$ cts.
Manitoba—				
Winnipeg	L. P. Noel	7,802 18	970 62	155 82
Dauphin	E. Widmeyer	5,713 52	19,755 38	.....
Saskatchewan—				
Moose Jaw	J. A. Reid	536,631 71	57,956 53	50 00
Prince Albert	L. C. Paterson	77,063 30	129,337 53	29 95
Alberta—				
Calgary	E. H. Crockett	72,291 97	89,800 95	68 21
Edmonton	A. Norquay	52,503 65	322,053 53	165 28
Lethbridge	E. F. Layton (Acting)	77,484 36	41,304 08	.....
Peace River	R. Cruickshank	33,216 35	5,308 63	.....
Grande Prairie	H. W. Clarke (Acting)	27,151 12	6,493 34	.....
British Columbia—				
Kamloops	H. J. Parker	2,979 44	75,954 80	.....
Revelstoke	T. J. Wadman	1,080 10	27,469 57	.....
New Westminster	E. Walmsley	8,281 39	403,086 71	.....

REVENUES COLLECTED AT DOMINION LANDS AGENCIES—*Concluded*

Agency	Agent	Mining Lands Division	School Lands Division	Miscellaneous	Total
		$ cts.	$ cts.	$ cts.	$ cts.
Manitoba—					
Winnipeg	L. P. Noel	67,727 23	7,432 52	1,232 19	85,320 56
Dauphin	E. Widmeyer	577 60	3,026 35	246 06	29,318 91
Saskatchewan—					
Moose Jaw	J. A. Reid	16,143 03	49,714 39	208,223 01	868,718 67
Prince Albert	L. C. Paterson	18,883 87	12,939 26	8,263 32	246,517 23
Alberta—					
Calgary	E. H. Crockett	252,665 08	87,630 46	13,879 97	516,336 64
Edmonton	A. Norquay	165,024 31	22,050 75	2,320 01	564,117 53
Lethbridge	E. F. Layton (Acting)	186,697 49	42,226 22	20,629 19	368,341 34
Peace River	R. Cruickshank	645 25	617 38	865 27	40,652 88
Grande Prairie	H. W. Clarke (Acting)	592 48	3,104 82	2,675 71	40,017 47
British Columbia—					
Kamloops	H. J. Parker	585 23	.....	.....	79,519 47
Revelstoke	T. J. Wadman	36 80	.....	.....	28,586 47
New Westminster	E. Walmsley	3,394 23	.....	.....	414,762 33

LANDS PATENTS

LETTERS PATENT

During the fiscal year ended March 31, 1929, there were 6,015 letters patent issued, covering a total area of 945,204 acres, divided according to provinces as follows:—

Province	Patents	Acres
Manitoba	559	72,555
Saskatchewan	3,159	537,613
Alberta	1,996	308,701
British Columbia	292	26,322
Yukon Territory	6	11
Northwest Territories	3	2
Totals	6,015	945,204

The various kinds of grants are summarized below and are dealt with in detail in statements A to G, inclusive.

Grants	Patents	Acres
Homesteads	2,208	334,220
Sales	781	87,662
Pre-emptions	710	112,364
Purchased homesteads	58	8,444
Railways	256	96,206
Special grants	1,491	214,697
Military bounty grants	2	320
Northwest halfbreed grants	28	5,346
Licences of occupation	3	9
Soldier grants	366	56,071
Hudson's Bay Company grants	112	29,865
Totals	6,015	945,204

There was an increase of 525 letters patent and an increase in the area patented of 6,552 acres, as compared with the previous year.

Since May, 1873, there have been issued 485,457 letters patent, aggregating an area of 106,293,855 acres. Those issued since July, 1883, are of record in the Land Patents and Records Division, and number about 470,360.

LANDS DISPOSED OF

Sixteen thousand one hundred and fifty-seven (16,157) homestead entries (including 4,691 second homesteads) were granted, aggregating an approximate area of 2,585,120 acres, made up by provinces as follows:—

Manitoba, 643; Saskatchewan, 5,808; Alberta, 8,933; British Columbia, 773; total, 16,157.

There was an increase of 8,924 in the number of homestead entries granted, as compared with the previous year.

By land agencies the 16,157 homestead entries are made up as follows:—

Manitoba.—Dauphin, 338; Winnipeg, 305; total, 643.

Saskatchewan.—Moose Jaw, 1,611; Prince Albert, 4,197; total, 5,808.

Alberta.—Calgary, 545; Edmonton, 3,646; Grande Prairie, 1,916; Lethbridge, 297; Peace River, 2,529; total, 8,933.

British Columbia.—Grande Prairie, 352; Kamloops, 23; New Westminster, 55; Peace River, 323; Revelstoke, 20; total, 773.

The 16,157 homestead entries represented 45,119 persons as compiled from information obtained from each entrant. Of these entries, 3,603 were made by residents of the several provinces of the Dominion; 1,536 by persons who had previously obtained homestead entries, which had been cancelled by default or at the request of the entrant in order, in most cases, that he might enter for other lands; 1,135 were made by persons from the British Isles; 1,357 by persons from the United States; 408 by Austrians; 250 by Hungarians; 463 by Russians; 37 by Finlanders; 367 by Norwegians; 65 by Swiss; 49 by Frenchmen; 36 by Belgians; 230 by Swedes; 385 by Germans; 109 by Roumanians; 871 by Poles; 160 by Danes; 405 by citizens of various other countries; and 4,691 were second homesteads.

There were 742 soldier grant entries made during the year, aggregating approximately 118,720 acres made up as follows:—

	Number of entries	Acres
Manitoba	28	4,480
Saskatchewan	249	39,840
Alberta	413	66,080
British Columbia (Railway Belt and Peace River Block)	52	8,320
Totals	742	118,720

By land agencies the soldier grants were as follows:—

Manitoba.—Dauphin, 6; Winnipeg, 22; total, 28.

Saskatchewan.—Moose Jaw, 93; Prince Albert, 156; total, 249.

Alberta.—Calgary, 34; Grande Prairie, 95; Edmonton, 143; Lethbridge, 4; Peace River, 137; total, 413.

British Columbia (Railway Belt and Peace River Block).—Grande Prairie, 24; Kamloops, 3; New Westminster, 2; Peace River, 21; Revelstoke, 2; total, 52.

There were 4,691 second homestead entries made during the year, aggregating approximately 750,560 acres, made up as follows:—

	Number of entries	Acres
Manitoba	116	18,560
Saskatchewan	1,950	312,000
Alberta	2,466	394,560
British Columbia (Railway Belt and Peace River Block)	159	25,440
Totals	4,691	750,560

By land agencies the 4,691 second homestead entries are made up as follows:—

Manitoba.—Dauphin, 67; Winnipeg, 49; total, 116.

Saskatchewan.—Moose Jaw, 688; Prince Albert, 1,262; total, 1,950.

Alberta.—Lethbridge, 124; Calgary, 242; Edmonton, 1,047; Grande Prairie, 471; Peace River, 582; total, 2,466.

British Columbia.—Grande Prairie, 106; Peace River, 42; Revelstoke, 1; Kamloops, 3; New Westminster, 7; total, 159.

CANCELLED ENTRIES

There were cancelled 6,632 entries as follows:—

—	Manitoba	Saskatchewan	Alberta	British Columbia
Homesteads	654	1,717	2,741	161
Soldier grant entries	124	204	285	11
Pre-emptions	.....	402	246	.....
Purchased homesteads	.....	25	13	.....
Sales	14	14	17	4
Totals	792	2,362	3,302	176

Value of improvements collected on cancelled homesteads: 541 refunds, $31,912.05.

STATEMENT A—Letters Patent issued covering Dominion Lands in Manitoba, Saskatchewan, Alberta, Northwest Territories, British Columbia and the Yukon Territory

No.	Nature of grant	From April 1, 1928 to March 31, 1929		From April 1, 1927 to March 31, 1928	
		Patents	Acres	Patents	Acres
1	British Columbia homesteads	121	11,400	132	13,602
2	British Columbia sales	13	167	24	825
3	Coal surface sales	.....	.....	2	71
4	Commutation grants	.....	.....	1	23
5	Drainage sales	12	609	10	814
6	Forestry sales	.....	.....	1	19
7	Homesteads	2,058	317,974	1,990	307,582
8	Homesteads, Peace River Block	27	4,225	40	6,360
9	Hudson's Bay Co.	112	29,865	15	7,919
10	Licences of occupation	3	9	11	36
11	Manitoba Act grants	.....	.....	1	52
12	Military bounty grants	2	320	5	800
13	Military homesteads	2	621	.....	.....
14	Mining lands sales	2	97	2	97
15	Mineral rights, sales (342 acres)	.....	.....	2	.....
16	Northwest half-breed grants	28	5,346	28	4,487
17	Northwest Mounted Police grants	.....	.....	2	160
18	Parish sales	1	.....	1	157
19	Pre-emption sales	710	112,364	676	107,250
20	Purchased homesteads	58	8,444	77	10,923
21	Quit claim, drainage sales	1	127	1	34
22	Quit claim, sales	6	253	2	2
23	Quit claim, special grants	53	242	1	67
	Railways:—				
24	Alberta and Great Waterways Railway Co.	1	3	1	2
25	Alberta Railway and Irrigation Co.	.....	.....	5	5,880
26	Calgary and Edmonton Railway Co. (minerals only, 161 acres)	.....	.....	1	.....
27	Canadian National Railway Co.	.....	.....	19	153
28	Canadian Northern Railway Co.	206	95,330	2	182
29	Canadian Northern Western Railway Co.	.....	.....	2	5
30	Canadian Pacific Railway grants	45	709	48	5,765
31	Canadian Pacific Railway road-bed and station grounds	3	158	.....	.....
32	Edmonton, Dunvegan and British Columbia Railway Co.	.....	.....	4	77
33	Grand Trunk Pacific Railway Co.	.....	.....	1	6
34	Grand Trunk Pacific Railway Townsite sales	.....	.....	1	212
35	Lacombe and North Western Railway	1	6	15	213
36	Lacombe and North Western Railway Townsite grants	.....	.....	1	11
37	Manitoba and South Eastern Railway grants	.....	.....	2	74
38	Sales	196	12,104	729	232,461
39	Sales, Peace River Block	2	143	2	48
40	School lands sales	543	74,151	851	118,859
41	Soldier grants	350	53,558	454	68,424
42	Soldier grants, Peace River Block	16	2,513	14	2,242
43	Special grants	1,417	211,894	285	40,905
44	Special grants (minerals only, 160 acres)	1	.....	1	.....
45	Special grants, Peace River Block	16	2,561	7	1,128
46	Special grants (timber only, 303 acres)	3	.....	3	.....
47	Yukon Territory homesteads	.....	.....	2	238
48	Yukon mining lands sales	.....	.....	8	413
49	Yukon Territory sales	5	11	8	74
50	Yukon Territory special grants	1	.....	.....	.....
	Totals	6,015	945,204	5,490	938,652

STATEMENT B—Letters Patent issued covering Dominion Lands in Manitoba

No.	Nature of grant	From April 1, 1928 to March 31, 1929		From April 1, 1927 to March 31, 1928	
		Patents	Acres	Patents	Acres
1	Commutation grants	.....	.....	1	23
2	Homesteads	273	40,744	304	45,549
3	Hudson's Bay Co	.....	.....	7	3,525
4	Manitoba Act grants	.....	.....	1	52
5	Mining lands sales	2	97	2	97
6	Northwest half-breed grants	.....	.....	2	183
7	Parish sales	1	.....	1	157
8	Pre-emption sales	.....	.....	2	320
9	Quit claim, sales	3	168	.....	.....
10	Quit claim, special grants	40	160	.....	.....
	Railways:—				
11	Canadian National Railway Co	.....	.....	7	85
12	Canadian Pacific Railway grants	1	1	2	.....
13	Canadian Pacific Railway road-bed and station grounds	1	2	.....	.....
14	Sales	42	1,615	47	1,075
15	School lands sales	26	3,496	37	3,704
16	Soldier grants	53	8,265	61	9,516
17	Special grants	117	18,007	20	2,221
18	Special grants (minerals only, 80 acres)	.....	.....	1	.....
	Totals	559	72,555	495	66,507

STATEMENT C—Letters Patent issued covering Dominion Lands in Saskatchewan

No.	Nature of grant	From April 1, 1928 to March 31, 1929		From April 1, 1927 to March 31, 1928	
		Patents	Acres	Patents	Acres
1	Drainage sales	6	239	.....	.....
2	Forestry sales	.....	.....	1	19
3	Homesteads	1,096	169,274	911	141,145
4	Hudson's Bay Co	10	2,715	5	2,307
5	Licences of occupation	2	8	3	20
6	Military bounty grants	2	320	5	800
7	Military homesteads	1	302	.....	.....
8	Northwest half-breed grants	28	5,346	23	3,503
9	Northwest Mounted Police grants	.....	.....	2	160
10	Pre-emption sales	585	92,508	571	90,610
11	Purchased homesteads	46	7,220	55	8,687
12	Quit claim, sales	1	48	2	2
13	Quit claim, special grants	.....	.....	1	67
	Railways:—				
14	Alberta Railway and Irrigation Co	.....	.....	5	5,880
15	Canadian National Railway Co	.....	.....	10	55
16	Canadian Northern Railway Co	206	95,330	2	182
17	Canadian Pacific Railway grants	.....	.....	9	4,862
18	Grand Trunk Pacific Railway Co	.....	.....	1	6
19	Manitoba and South Eastern Railway grants	.....	.....	2	74
20	Sales	62	3,283	98	4,033
21	School lands sales	278	38,382	566	80,702
22	Soldier grants	174	27,464	207	32,438
23	Special grants	662	95,174	55	7,092
	Totals	3,159	537,613	2,534	382,644

STATEMENT D—Letters Patent issued covering Dominion Lands in Alberta

No.	Nature of grant	From April 1, 1928 to March 31, 1929		From April 1, 1927 to March 31, 1928	
		Patents	Acres	Patents	Acres
1	Coal surface sales	.....	.....	2	71
2	Drainage sales	6	370	10	814
3	Homesteads	689	107,956	775	120,888
4	Hudson's Bay Co	102	27,150	3	2,087
5	Licences of occupation	1	1	8	16
6	Military homesteads	1	319	.....	.....
7	Mineral rights, sales (342 acres)	.....	.....	2	.....
8	Northwest half-breed grants	.....	.....	3	801
9	Pre-emption sales	125	19,856	103	16,320
10	Purchased homesteads	7	1,127	13	2,075
11	Quit claims, drainage sales	1	127	1	34
12	Quit claim, sales	2	37	.....	.....
13	Quit claim, special grants	13	82	.....	.....
	Railways:—				
14	Alberta and Great Waterways Railway Co.	1	3	1	2
15	Calgary and Edmonton Railway Co. (minerals only, 161 acres)	.....	.....	1	.....
16	Canadian National Railway Co	.....	.....	2	13
17	Canadian Northern Western Railway Co	.....	.....	2	5
18	Edmonton, Dunvegan and British Columbia Railway Co	.....	.....	4	77
19	Grand Trunk Pacific Railway Townsite sale	.....	.....	1	212
20	Lacombe and North Western Railway Co	1	6	15	213
21	Lacombe and North Western Railway Townsite grant	.....	.....	1	11
22	Sales	89	7,204	578	227,348
23	School lands sales	239	32,273	248	34,453
24	Soldier grants	104	16,091	164	25,126
25	Special grants	614	96,099	205	31,149
26	Special grants (minerals only, 160 acres)	1	.....	.....	.....
	Totals	1,996	308,701	2,142	461,715

STATEMENT E—Letters Patent issued covering Dominion Lands in British Columbia

No.	Nature of grant	From April 1, 1928 to March 31, 1929		From April 1, 1927 to March 31, 1928	
		Patents	Acres	Patents	Acres
1	British Columbia homesteads	121	11,400	132	13,602
2	British Columbia sales	13	167	24	825
3	Homesteads, Peace River Block	27	4,225	40	6,360
4	Purchased homesteads	5	97	9	161
	Railways:—				
5	Canadian Pacific Railway grants	44	708	37	903
6	Canadian Pacific Railway road-bed and station grounds	2	156	.....	.....
7	Sales, Peace River Block	2	143	2	48
8	Soldier grants	19	1,738	22	1,344
9	Soldier grants, Peace River Block	16	2,513	14	2,242
10	Special grants	24	2,614	5	443
11	Special grants, Peace River Block	16	2,561	7	1,128
12	Special grants (timber only, 303 acres)	3	.....	3	.....
	Totals	292	26,322	295	27,056

STATEMENTS F AND G—Letters Patent issued covering Dominion Lands

F—In the Yukon Territory

No.	Nature of grant	From April 1, 1928 to March 31, 1929		From April 1, 1927 to March 31, 1928	
		Patents	Acres	Patents	Acres
1	Yukon Territory homesteads	.....	.....	2	238
2	Yukon mining lands sales	.....	.....	8	413
3	Yukon Territory sales	5	11	8	74
4	Yukon Territory special grants	1	.....	.....	.....
	Totals	6	11	18	725

G—In the Northwest Territories

No.	Nature of grant	From April 1, 1928 to March 31, 1929		From April 1, 1927 to March 31, 1928	
		Patents	Acres	Patents	Acres
1	Sales	3	2	6	5

STATEMENT H—Number of Homestead Entries made during the fiscal year, 1928-1929, the Nationality of the Homesteaders and the Provinces in which the entries were made

Country of origin	Provinces				Total	Country of origin	Provinces				Total
	Manitoba	Saskatchewan	Alberta	British Columbia			Manitoba	Saskatchewan	Alberta	British Columbia	
Canada—						Brought forward	421	2,952	4,854	535	8,762
Ontario	33	281	439	65	818	Denmark	2	36	113	9	160
Quebec	9	163	344	14	530	Iceland	2	2	1	.....	5
Nova Scotia	2	18	58	5	83	Sweden	8	87	124	11	230
New Brunswick	2	18	39	13	72	Norway	6	113	225	23	367
Prince Edward Island	1	7	19	4	31	Russia	12	209	235	7	463
Manitoba	135	263	264	34	696	South America	.....	2	.....	.....	2
Saskatchewan	5	536	198	27	766	Labrador	.....	.....	1	.....	1
Alberta	1	25	454	37	517	Bulgaria	.....	.....	2	.....	2
British Columbia	1	7	51	31	90	China	.....	6	2	.....	8
Persons who had previous entry	79	459	923	75	1,536	Mexico	.....	2	1	.....	3
Newfoundland	.....	2	2	.....	4	Bermuda	.....	.....	1	.....	1
Africa	.....	1	.....	.....	1	Australia	.....	1	1	2	4
United States	16	410	827	104	1,357	New Zealand	.....	.....	1	.....	1
England	36	220	416	55	727	India	.....	2	4	1	7
Scotland	9	74	153	35	271	Greece	.....	.....	1	.....	1
Ireland	2	52	65	18	137	Poland	51	227	589	4	871
France	1	25	21	2	49	Finland	3	5	26	3	37
Belgium	4	8	24	.....	36	Wales	2	11	19	6	38
Switzerland	2	26	33	4	65	Czecho-Slovakia	7	26	110	7	150
Italy	.....	2	11	1	14	Hungary	7	159	83	1	250
Roumania	2	33	73	1	109	Jugo-Slavia	1	11	35	2	49
Syria	.....	.....	1	.....	1	Latvia	2	.....	2	1	5
Germany	5	161	217	2	385	Lithuania	3	4	25	.....	32
Austria	76	151	178	3	408	Esthonia	.....	3	11	1	15
Holland	.....	10	44	5	59	Luxemburg	.....	.....	.....	1	1
						Second homesteads	116	1,950	2,466	159	4,691
Carried forward	421	2,952	4,854	535	8,762	Totals	643	5,808	8,933	773	16,157

Number of souls represented by above entries, 45,119

STATEMENT I—Number of Homestead Entries made in the Western Provinces during the fiscal year by persons coming from the United States

State	Provinces				Total	State	Provinces				Total
	Manitoba	Saskatchewan	Alberta	British Columbia			Manitoba	Saskatchewan	Alberta	British Columbia	
Alabama	.....	2	.....	.....	2	Brought forward	11	331	599	82	1,023
Arkansas	.....	1	4	.....	5	Nebraska	.....	13	22	4	39
California	1	3	7	2	13	Nevada	.....	.....	1	.....	1
Carolina, North	.....	1	7	.....	8	New Hampshire	.....	2	2	.....	4
Colorado	.....	.....	10	.....	10	New Jersey	.....	1	6	1	8
Connecticut	1	2	6	.....	9	New Mexico	.....	.....	1	.....	1
Dakota, North	3	100	113	17	233	New York	.....	8	21	3	32
Dakota, South	.....	19	59	4	82	Ohio	4	5	19	.....	28
Georgia	.....	.....	1	.....	1	Oklahoma	.....	2	37	3	42
Idaho	.....	1	22	.....	23	Oregon	.....	1	14	1	16
Illinois	.....	14	32	4	50	Pennsylvania	.....	3	12	.....	15
Indiana	.....	5	16	.....	21	Rhode Island	.....	3	4	.....	7
Iowa	1	31	39	7	78	Tennessee	.....	1	4	1	6
Kansas	.....	6	36	7	49	Texas	.....	4	6	.....	10
Kentucky	.....	.....	1	1	2	Utah	.....	.....	2	1	3
Maine	.....	5	11	2	18	Vermont	.....	1	2	.....	3
Massachusetts	1	11	23	1	36	Virginia	.....	2	3	.....	5
Michigan	.....	26	39	3	68	Washington	.....	2	34	2	38
Minnesota	4	94	122	25	245	Wisconsin	1	31	36	6	74
Missouri	.....	7	17	4	28	Wyoming	.....	.....	2	.....	2
Montana	.....	3	34	5	42						
Carried forward	11	331	599	82	1,023	Totals	16	410	827	104	1,357

STATEMENT J—Number of Homestead Entries made during the fiscal year, as compared with the previous fiscal year

Agency	Manitoba		Saskatchewan		Alberta		British Columbia		Total
	1928–29	1927–28	1928–29	1927–28	1928–29	1927–28	1928–29	1927–28	
Battleford	.....	.....	.....	.....	.....	.....	.....	.....	.....
Calgary	.....	.....	.....	.....	545	176	.....	.....	.....
Dauphin	338	305	.....	.....	.....	.....	.....	.....	.....
Edmonton	.....	.....	.....	.....	3,646	1,450	.....	.....	.....
Grande Prairie	.....	.....	.....	.....	1,916	845	352	64	.....
Kamloops	.....	.....	.....	.....	.....	.....	23	33	.....
Lethbridge	.....	.....	.....	.....	297	125	.....	.....	.....
Moose Jaw	.....	.....	1,611	950	.....	.....	.....	.....	.....
New Westminster	.....	.....	.....	.....	.....	.....	55	11	.....
Peace River	.....	.....	.....	.....	2,529	815	323	39	.....
Prince Albert	.....	.....	4,197	2,011	.....	.....	.....	.....	.....
Revelstoke	.....	.....	.....	.....	.....	.....	20	26	.....
Saskatoon	.....	.....	.....	.....	.....	.....	.....	.....	.....
Swift Current	.....	.....	.....	.....	.....	.....	.....	.....	.....
Winnipeg	305	383	.....	.....	.....	.....	.....	.....	.....
Fiscal year 1928–29	.....	.....	.....	.....	.....	.....	.....	.....	16,157
Fiscal year 1927–28	.....	.....	.....	.....	.....	.....	.....	.....	7,233
Net increase	.....	.....	.....	.....	.....	.....	.....	.....	8,924
Totals	643	688	5,808	2,961	8,933	3,411	773	173	.....

STATEMENT K—Number of Soldier Grant Entries made during the fiscal year as compared with the previous fiscal year

Agency	Manitoba		Saskatchewan		Alberta		British Columbia		Total
	1928-29	1927-28	1928-29	1927-28	1928-29	1927-28	1928-29	1927-28	
Battleford									
Calgary					34	27			
Dauphin	6	9							
Edmonton					143	90			
Grande Prairie					95	37	24	11	
Kamloops							3	5	
Lethbridge					4	14			
Moose Jaw			93	75					
New Westminster							2	6	
Peace River					137	48	21	3	
Prince Albert			156	151					
Revelstoke							2	2	
Saskatoon									
Swift Current									
Winnipeg	22	26							
Fiscal year 1928-29									742
Fiscal year 1927-28									504
Net increase									238
Totals	28	35	249	226	413	216	52	27	

SCHOOL LANDS

During the fiscal year ended March 31, 1929, school lands were disposed of by public auction and private sales in the provinces of Manitoba, Saskatchewan, and Alberta as follows:—

MANITOBA

How disposed of	Area in acres	Sale price $ cts.	Average per acre $ cts.
By private sale in accordance with provisions of Dominion Lands Act	12·14	96 98	7 99

SASKATCHEWAN

Public auction	357,381·47	4,606,579 56	12 89
By private sale in accordance with provisions of Dominion Lands Act	130·40	1,571 88	12 05
Totals	357,411·87	4,608,151 44	12 89

ALBERTA

Public auction—Summer 1928	163,144·95	2,308,026 29	14 15
Fall 1928	136,026·45	1,975,475 72[1]	14 52
Total sold by public auction	299,171·40	4,283,502 01	14 32
By private sale in accordance with provisions of Dominion Lands Act	221·94	2,817 65	12 70
Totals	299,393·34	4,286,319 66	14 32

[1]Includes the sale price of four town lots, $725.

After making the necessary deductions for cancelled sales and adjustments in regard to alterations in areas, the approximate net areas and values of school lands and town lots disposed of to March 31, 1929, were as follows:—

Province	Area in acres	Sale price	Average per acre	Sale price of town lots
		$ cts.	$ cts.	$ cts.
Manitoba	633,932·855	6,075,293 83	9 58	5,240 00
Saskatchewan	1,771,554·561	28,243,520 02	15 94	12,646 00
Alberta	1,222,613·744	17,498,827 54	14 31	39,415 00

The number of permits and leases issued, the number of leases in good standing, and the combined revenue derived therefrom for the provinces of Manitoba, Saskatchewan, and Alberta for the fiscal year were as follows:—

—	Permits issued	Leases issued	Leases in good standing	Revenue derived
				$ cts.
Grazing	3,113	.....	.....	30,679 64
Cultivation	349	.....	.....	19,702 36
Hay	1,409	.....	.....	3,894 73
Timber	390	.....	.....	14,772 78
Coal	.....	5	68	15,090 43
Petroleum and natural gas	.....	189	948	49,121 03
Special	.....	2	38	1,279 36

Registration Fees.—During the fiscal year 504 assignments of sales and leases were registered, comprising lands in the provinces of Manitoba, Saskatchewan, and Alberta. The fees amounted to $1,684.60.

REVENUE AND EXPENDITURE STATEMENTS

The total net revenue collected for the fiscal year was as follows:—

Manitoba	$ 57,838 54
Saskatchewan	1,376,229 68
Alberta	1,211,234 20
	$ 2,645,302 42

The revenues collected for the fiscal year (less principal moneys and less expenditures and paid to the provinces of Manitoba, Saskatchewan, and Alberta, were as follows:—

Province	Revenue other than principal moneys	Expenditure	Amount paid to province
	$ cts.	$ cts.	$ cts.
Manitoba	34,458 78	13,682 54	20,776 24
Saskatchewan	420,296 77	67,966 69	352,330 08
Alberta	381,558 60	50,030 78	331,527 82

The balance standing to the credit of the School Lands Fund for each province as on March 31, 1929, and the interest paid on the investment for the fiscal year 1928-29 were as follows:—

Province	Total amount at credit of fund	Amount invested in debenture stock	Interest paid on investments
	$ cts.	$ cts.	$ cts.
Manitoba	5,888,709 88	5,888,000 00	293,412 50
Saskatchewan	16,646,177 08	16,645,000 00	788,150 00
Alberta	9,124,536 28	9,124,000 00	423,687 50

Statements herewith lettered A, B, and C respectively, show the revenue collected in respect of each of the provinces of Manitoba, Saskatchewan, and Alberta for the fiscal year, duly classified.

Statements herewith lettered D, E, and F respectively, show the balance standing to the credit of the School Lands Fund for each province as on March 31, 1929, after deducting amounts invested in debenture stock as provided for by Order in Council.

STATEMENT A—Manitoba School Lands—Revenue collected for fiscal year

Source	Gross totals		Refunds	Net totals
	$ cts.	$ cts.	$ cts.	$ cts.
Sales—Principal	23,894 00			
Add adjustments	8 66			
		23,902 66	51 73	23,850 93
Interest	20,615 87			
Less adjustments	8 66			
		20,607 21	36 47	20,570 74
Cultivation	3,559 43			
Less: Office fees transferred to Dominion Lands	74 00			
		3,485 43	.....	3,485 43
Grazing	3,516 58			
Less: Office fees transferred to Dominion Lands	371 00			
		3,145 58	15 13	3,130 45
Timber	5,696 83			
Less: Office fees transferred to Dominion Lands	134 00			
		5,562 83	411 19	5,151 64
Hay	1,836 51			
Less: Office fees transferred to Dominion Lands	417 00			
		1,419 51	77 50	1,342 01
Petroleum and natural gas	.....	25 00	.....	25 00
Registration fees	.....	37 50	6 00	31 50
Miscellaneous	.....	250 84	.....	250 84
Totals	.....	58,436 56	598 02	57,838 54

STATEMENT B—Saskatchewan School Lands—Revenue collected for fiscal year

Source	Gross totals		Refunds	Net totals
	$ cts.	$ cts.	$ cts.	$ cts.
Sales—Principal	969,627 53			
Less adjustments	2,566 82	967,060 71	558 10	966,502 61
Interest	370,743 74			
Add adjustments	2,647 82	373,391 56	157 41	373,234 15
Cultivation	7,311 03			
Less: Office fees transferred to Dominion Lands	108 00			
Less adjustments	84 80	7,118 23	778 40	6,339 83
Grazing	10,652 66			
Less: Office fees transferred to Dominion Lands	885 00			
Add adjustments	3 80	9,771 46	326 52	9,444 94
Timber	1,730 32			
Less: Office fees transferred to Dominion Lands	137 00	1,593 32	227 64	1,365 68
Hay	2,865 46			
Less: Office fees transferred to Dominion Lands	743 00	2,122 46	126 40	1,996 06
Coal		677 60	20 00	657 60
Petroleum and natural gas		4,029 05		4,029 05
Registration fees		406 65	56 50	350 15
Miscellaneous	12,574 81			
Less: Office fees transferred to Dominion Lands	1 00	12,573 81	264 20	12,309 61
Totals		1,378,744 85	2,515 17	1,376,229 68

STATEMENT C—Alberta School Lands—Revenue collected for fiscal year

Source	Gross totals		Refunds	Net totals
	$ cts.	$ cts.	$ cts.	$ cts.
Sales—Principal	849,060 05			
Less adjustments	2,027 00	847,033 05	1,142 38	845,890 67
Interest	262,522 55			
Add adjustments	2,027 00	264,549 55	2 17	264,547 38
Cultivation	11,173 33			
Less: Office fees transferred to Dominion Lands	167 00			
Less adjustments	4 16	11,002 17	1,485 07	9,517 10
Grazing	25,480 50			
Less: Office fees transferred to Dominion Lands	1,857 00			
Add adjustments	4 16	23,627 66	5,523 41	18,104 25
Timber	8,633 42			
Less: Office fees transferred to Dominion Lands	119 00	8,514 42	258 96	8,255 46
Hay	833 66			
Less: Office fees transferred to Dominion Lands	249 00	584 66	28 00	556 66
Coal		14,472 83	40 00	14,432 83
Petroleum and natural gas		45,257 73	190 75	45,066 98
Registration fees		1,429 20	126 25	1,302 95
Miscellaneous	7,740 66			
Less: Office fees transferred to Dominion Lands	1 00	7,739 66	4,179 74	3,559 92
Totals		1,224,210 93	12,976 73	1,211,234 20

STATEMENT D—Revenue and Expenditure—Manitoba School Lands, 1928-9

Particulars	Dr.	Cr.
	$ cts.	$ cts.
By balance April 1, 1928		858 95
" sales		44,421 67
" cultivation permits		3,485 43
" grazing rent, timber dues, hay dues, petroleum and miscellaneous		9,899 94
" registration fees		31 50
" interest on fund		471 17
To cost of management at Ottawa	12,374 33	
" outside salaries, printing and stationery, advertising and general expenses	1,308 21	
" revenue and interest paid to Manitoba Government	20,776 24	
" investments in debenture stock	24,000 00	
" balance March 31, 1929	709 88	
Totals	59,168 66	59,168 66

STATEMENT E—Revenue and Expenditure—Saskatchewan School Lands, 1928-9

Particulars	Dr.	Cr.
	$ cts.	$ cts.
By balance on April 1, 1928		674 47
" sales		1,339,736 76
" cultivation permits		6,339 83
" timber dues, hay dues, grazing rent, coal, petroleum and miscellaneous		29,802 94
" registration fees		350 15
" interest on fund		10,569 70
To cost of management at Ottawa	37,122 99	
" outside salaries, printing, stationery and general expenses	30,843 70	
" revenue and interest paid to Saskatchewan Government	352,330 08	
" investments in debenture stock	966,000 00	
" balance March 31, 1929	1,177 08	
Totals	1,387,473 85	1,387,473 85

STATEMENT F—Revenue and Expenditure—Alberta School Lands, 1928-9

Particulars	Dr.	Cr
	$ cts.	$ cts.
By balance on April 1, 1928		645 61
" sales		1,110,438 05
" cultivation permits		9,517 10
" timber dues, hay dues, grazing rent, coal, petroleum and miscellaneous		89,976 10
" registration fees		1,302 95
" interest on fund		16,215 07
To cost of management at Ottawa	24,748 66	
" outside salaries, advertising, printing, stationery and general expenses	25,282 12	
" revenue and interest paid to Alberta Government	331,527 82	
" investments in debenture stock	846,000 00	
" balance March 31, 1929	536 28	
Totals	1,228,094 88	1,228,094 88

MINING LANDS

The granting of titles to mining rights, the property of the Crown in the right of the Dominion, owing to recent discoveries of oil and gas and of metallic minerals in Manitoba and Saskatchewan, is becoming a matter of increasing importance and complexity.

The mining of coal is still the major mining industry in territory administered by the Dominion Government, but this supremacy may not be maintained if the number of producing oil wells continues to increase.

The total quantity of coal produced in Alberta and Saskatchewan during the last calendar year is officially recorded as 7,808,043 tons.

There has been increased activity in metalliferous mining in the province of Manitoba. The completion of a branch line of railway to Flinflon lake has made it possible for the Hudson Bay Mining and Smelting Company, Limited, operating the Flinflon mine, to proceed with the erection of a smelter of large capacity and to develop a water power at Island falls on the Churchill river. Many other properties in this particular field are being thoroughly prospected, and in some instances developed into mines to be ready for production when the smelter is completed.

The use of the aeroplane has made it feasible for well-equipped prospecting parties to extend their operations far into the north, and a number of mineral claims were staked and recorded comprising land on the shores of Hudson bay. In the Yukon Territory there have been produced by means of placer mining operations 43,644·83 ounces of gold, and from ores the production was about 2,800,000 ounces of silver and 7,400,000 pounds of lead.

The total value of the mineral production in the Yukon Territory for the fiscal year is estimated at $3,372,896.60.

The one concentrating mill in the Yukon Territory, which is operated in the Mayo district by the Treadwell Yukon Company, Limited, was in continuous operation during the year.

All mineral rights are disposed of by lease, licence or permit for limited periods of time, and not by sale. The sources of revenue are confined to fees, rentals, and royalties, and from these several sources there was collected during the last fiscal year the sum of $1,053,581.68, an increase of $216,506.61 over the previous year.

Expenditures incurred in the actual development of petroleum and natural gas rights acquired under lease may, under the regulations, be accepted in satisfaction of rentals which should otherwise be paid in cash, and under this provision, rentals due the Crown, amounting to $570,436.90 were satisfied by such expenditures, and so reduced the revenue of the branch to that extent. The total revenue in cash, together with expenditures accepted in lieu of rental, amounted, therefore, to $1,624,018.58 during the year.

The provision of the regulations for the disposal at auction of petroleum and natural gas rights in areas comprised in cancelled leases has resulted in the payment to the Crown of the sum of $47,299.65 on account of bonus, of which amount the sum of $18,367.61 was collected during the last fiscal year.

That portion of the revenue of the Yukon Territory derived from mining rights only, including the export tax on gold shipped from the territory, amounted to $63,631.28.

Petroleum and Natural Gas.—There are now in force 7,587 petroleum and natural gas leases affecting Dominion lands, and embracing a total area of 1,114,658·65 acres; distributed as follows: In Manitoba, 57 leases, comprising 14,616 acres; in Saskatchewan, 369 leases, comprising 92,281·55 acres; in Alberta, 6,833 leases, comprising 963,461·82 acres; in British Columbia, 323 leases, comprising 40,245·95 acres; and in the Northwest Territories, 5 leases, comprising 4,053·33 acres.

During the year an Order in Council was passed providing regulations governing the issue of permits to prospect for petroleum and natural gas, the property of the Crown, and under these regulations 78 permits were issued during the year, comprising 71,628·74 acres.

The number of petroleum and natural gas leases issued during the last fiscal year is 1,741, comprising a total area of 193,247·49 acres, and the total revenue from this source for the year amounted to $389,976.28.

There have been issued since the regulations governing the leasing of petroleum and natural gas rights were established 40,664 leases, and the total revenue which has been derived from this source since the beginning has amounted to $5,991,849.62, and the total expenditures which have been accepted in lieu of rental during the same period have been $3,597,708.36.

On lands leased from the Crown about 440 wells have been drilled to depth for the discovery of oil and gas. Of these wells 153 produced gas in volume, and from 100 of the wells drilled, oil has been produced.

From lands in the province of Alberta there have been produced during the year 540,000 barrels of oil, of which 250,000 barrels (46 per cent) were produced from wells situated on Dominion lands. Of the last mentioned, 170,000 barrels were crude naphtha, and the remainder, 80,000 barrels, comprised crude oil.

In the Wainwright district, located southeast of Edmonton, about 32 wells have been drilled, and of these seven are capable of producing gas in quantity, and oil has been obtained from 11 wells.

Many localities in Alberta, including the cities of Edmonton, Calgary, Lethbridge, and Medicine Hat, are supplied with natural gas produced from areas most of which have been leased under the provisions of the regulations established by this department.

Coal.—Prior to the year 1906 coal mining rights were disposed of by sale, at a price varying from seven to ten dollars an acre, and subject to the payment of a royalty of ten cents per ton on the quantity of coal mined, which royalty, however, has since been reduced to seven cents per ton. Such rights have since been disposed of by terminable lease, at a rental of one dollar an acre per annum and a royalty at the rate of five cents per ton. The area of coal mining rights disposed of by sale was approximately 245,070 acres, and the total revenue which was collected from the sale of such rights was $1,565,833.88. The total number of coal mining leases in force at the close of the fiscal year was 645, comprising a total area of 231,664·68 acres, distributed as follows: In Alberta, 571 leases, comprising 224,492·43 acres; in Saskatchewan, 69 leases, comprising 3,562·25 acres; in British Columbia, 3 leases, comprising 3,470 acres; in the Yukon Territory, one lease, comprising 40 acres; and in the Northwest Territories, one lease, comprising 100 acres.

The total number of coal mining leases issued during the year was 109, comprising 48,572·90 acres, and the total revenue collected during the year for rental of such rights was $160,027·64.

The following statement shows the amounts which have been collected on account of royalty on coal mined from lands in the western provinces, the Northwest Territories and the Yukon Territory, respectively, during each of the past twenty-two years:—

Year	Alberta	Saskatchewan	British Columbia	Yukon Territory	Northwest Territories
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
1907–1908	7,621 67	4 30	Nil	1,543 38	Nil
1908–1909	5,322 39	358 11	"	371 73	"
1909–1910	153,559 98	1,672 50	3 00	136 38	"
1910–1911	218,932 88	2,184 74	3 50	125 00	"
1911–1912	104,894 55	2,034 74	2 78	390 00	"
1912–1913	142,997 79	3,145 72	6 95	1,069 11	"
1913–1914	147,198 75	2,123 43	19 35	Nil	"
1914–1915	104,489 77	1,880 06	4 90	"	"
1915–1916	67,190 17	2,601 52	3 50	"	5 10
1916–1917	149,447 82	2,228 08	8 92	"	Nil
1917–1918	144,634 75	4,046 55	Nil	"	6 00
1918–1919	175,687 66	3,193 05	"	"	Nil
1919–1920	181,641 80	2,573 32	"	"	"
1920–1921	190,545 80	2,703 41	"	"	"
1921–1922	185,436 88	3,309 86	"	"	"
1922–1923	171,723 83	3,035 18	"	"	"
1923–1924	210,389 53	1,689 45	"	"	"
1924–1925	148,979 10	2,421 11	7 50	"	1 50
1925–1926	188,277 94	3,024 94	Nil	"	2 00
1926–1927	218,150 10	4,726 93	"	"	3 50
1927–1928	231,757 96	7,589 18	"	"	2 20
1928–1929	254,616 27	5,322 75	12 75	"	2 80

The total revenue derived from fees, rentals and royalties collected in connection with coal mining rights during the year amounted to $419,982.21.

Quartz and Placer Mining.—Placer mining claims are held under yearly lease, subject to an annual expenditure in development work. Quartz mining claims are similarly held until development has sufficiently progressed and the claim has been surveyed under proper instructions. A lease is then issued for a continuous period of twenty-one years, subject to royalty only.

During the year entries were granted for 11,684 quartz mining claims, of which number 11,650 were for claims in the western provinces, for the most part in Manitoba. Entries were also granted for 105 placer mining claims staked and applied for during the year, and 1,894 such claims, previously acquired, were renewed for another year.

Final leases have been granted for 1,029 mineral claims, comprising a total area of 52,694.29 acres, of which number 139 leases were issued during the fiscal year, comprising an area of 5,519.29 acres.

In the Mayo district of the Yukon Territory, where the Treadwell Yukon Company, Limited, operates a mill, there were treated in that mill 5,282 tons of ore during the last year. From this ore, 382 tons of concentrates were produced. The total shipments of high-grade ore and of concentrates amounted to about 6,534 tons.

During the past year, owing to the interest being taken in the metallic minerals of northern Manitoba and Saskatchewan, the department after thorough investigation decided to enact new quartz mining regulations to contain certain changes which have been found, by experience, to be satisfactory in the other provinces of the Dominion, but the new regulations did not become effective until after the close of the fiscal year.

Quarrying.—Under the Quarrying Regulations, which provide for the disposal of Dominion lands containing limestone, granite, slate, marble, gypsum, marl, gravel, sand, clay, and other like substances, 263 leases are now in force, comprising an area of 8,212.01 acres. The revenue collected from this source during the year amounted to $10,579.91.

Bituminous Sands.—The deposits of bituminous sands, commonly known as tar-sands, on the Athabaska river and its tributaries, cover an area of approxi-

mately five thousand square miles, of varying depth, density, and richness. Regulations have not been made for the disposal of this product, but no application for a location is considered until the applicant has submitted satisfactory evidence that he has acquired a process for the commercial recovery of the hydro-carbon content of such tar-sands, and has demonstrated the feasibility of such process. An area of 140 square miles of these deposits, being that of greatest richness and least overburden, has been reserved for tar-sand development purposes only.

The total revenue which has been derived from the disposal of tar-sand rights amounted to $40,851.10. Three leases were in force, comprising a total area of 3,643 acres.

Alkali.—Regulations have been made for the disposal of natural accumulations of soluble mineral salts, comprising, for the most part, sodium and magnesium sulphates, found in a comparatively pure condition in certain of the sloughs and shallow lakes of southern Saskatchewan. Under these regulations, 34 leases have been granted, comprising a total area of 14,655 acres, and the revenue derived from this source during the fiscal year amounted to $2,031.87. A number of these locations have been developed, plants for the purification and refining of the product have been erected at a very considerable cost, and large quantities of the refined salts have been disposed of to the different pulp and paper companies for use in the manufacture of certain grades of paper.

Gold Royalty.—The total amount which has been collected for royalty on gold obtained from placer deposits in the Yukon Territory up to March 31, 1929, was $4,951,717.50, of which amount $16,366.79 was collected during the fiscal year.

For the purpose of estimating royalty, the gold is valued at $15 an ounce, which is below its real value. The total value of the gold which has been produced from placer mining operations in that territory might conservatively be placed at $167,122,460.

Dredging.—Three leases to dredge for minerals in the beds of rivers in the Yukon Territory are now in force, comprising a total river stretch of 14·43 miles. The total revenue derived from this source up to March 31, 1929, amounted to $202,254.79. These leases comprise portions of the bed of the Klondike river.

For the purpose of gold recovery there are four dredges engaged in mining in the Yukon Territory, all of which are being operated by hydro-electric motive power.

Fifty-two leases to dredge for minerals in the beds of rivers in Saskatchewan and Alberta, are now in force, having a total frontage of 243¼ miles. Of these leases 44 are in Alberta and 8 in Saskatchewan. The total revenue derived from this source amounts to $65,681.81, of which sum $1,963.83 was collected during the fiscal year.

Hydraulic Mining.—The regulations for the disposal of hydraulic mining locations in the Yukon Territory were withdrawn by Order in Council dated February 4, 1904, but the leases then in force were not affected by such withdrawal. There are still five hydraulic mining locations, held under lease, comprising a total area of fifteen square miles. Rentals, amounting to $176,190 have been collected on account of such locations, the amount collected during the fiscal year being $3,988.29.

Water Rights.—There are now in force in the Yukon Territory 502 grants to divert water for mining purposes under the provisions of the Yukon Placer Mining Act, which grants aggregate a total of 13,082 miner's inches.

The report for the fiscal year from the Gold Commissioner of the Yukon Territory dealing with mining in that territory is attached.

Report of the Gold Commissioner, Dawson, Yukon Territory, Regarding Mining

PLACER GOLD MINING

The amount of placer gold mined during the year on which royalty export tax was paid was 43,644·83 ounces, an increase over the previous year of 5,761·36 ounces, or an increase in the total revenue of over twenty per cent.

Burrall and Baird, Limited.—This company operated dredge *Canadian No. 2* on Hydraulic Mining Lease No. 18. This dredge commenced digging on May 28, and closed down on December 31, having dredged 1,301,000 cubic yards. Practically the whole of this ground was thawed by means of water under pressure. During the season of 1928, 72,600 cubic yards of ground were thawed by cold-water process, the water being pumped from the Klondike river and distributed by means of four electrically driven pumps whose maximum flow during the season was 13,000 gallons per minute.

Three Keystone drills operated at the head of the dredge during the entire season drilling for thawing purposes and also for values.

Dredge *Canadian No. 3.*—The machinery required to equip this dredge arrived during the summer and is now ready to be installed. A crew of men were employed during the last season doing the necessary repair work.

Dredge *Canadian No. 4* commenced operations on May 10, on Hydraulic Mining Lease No. 18, and completed its operations on December 3, having dredged 1,294,000 cubic yards. One Keystone drill was operated at the head of this dredge drilling for values.

A new caterpillar was added to the equipment of the company, making four in all, which are in constant use throughout the season, as well as three trucks and nine automobiles.

The Twelvemile Ditch was successfully maintained during the season, and the pipe lines and flumes reconditioned. Two hydraulic pits were continuously worked and the necessary flumes and cuts extended on Jackson and Crofton hills. Considerable preliminary work was done on Trail hill. There were 367,000 cubic yards of gravel and bed rock washed by hydraulicking and 83,000 twenty-four-hour miner's-inches of water used.

An average of eighty-eight men was employed over a period of eight months, and an additional forty men were employed over a period of six months on the Twelvemile Ditch and hydraulics.

Export tax, amounting to $6,371.94, was paid on gold recovered by the dredges and shipped out of the territory, and $1,472.35 from hydraulic operations.

The New North West Corporation, Limited.—This company and its subsidiaries, the Dominion Mining Company, Limited; the Big Creek Mining Company, Limited; the Calder Mining Company, Limited; and the Sulphur Mining Company, Limited carried on extensive operations during the season.

The hydro-electric plant at North Fork was operated continuously throughout the year and generated a total of 11,770,100 K.W.H. Power was furnished to Burrall and Baird, Limited, to operate their dredges and carry on other enterprises; the Dominion Mining Company, Limited; the Big Creek Mining Company, Limited; the Calder Mining Company, Limited; and also to the Dawson Electric Light and Power Company, Limited, for light and power for the city of Dawson; and to the Dawson City Water and Power Company, Limited, for pumping and heating the water supply for the city of Dawson.

Klondike Power Canal.—The following work was done on this power canal under Water Grant No. 14, between April 1 and December 18. A preliminary and location survey was made for a distance of sixteen miles; seven miles of

high tension, and ten miles of secondary transmission lines were constructed, and a distance of nine miles of high tension line was reconditioned. Two electric shovels, Model No. 37, weighing seventy-five tons each, were freighted a distance of thirty-two miles to Shovel camp on the new canal, and were assembled and commenced digging on September 6; closed down on December 1; 7·17 miles of ditch dug. A log dam was also constructed across Lee creek.

North Fork Canal.—This canal was kept in efficient condition during the season. An eight-inch gravel pump and steel pontoons with the necessary electric equipment were freighted to the North Fork intake and used during the season for cleaning out and increasing the depth of the canal. Eighty miles of power line were kept in efficient repair during the year.

Dredge *New North West No. 1* commenced digging on May 16, on Creek Claim No. 7-A Above Lower Discovery on Dominion creek and closed down on November 25, on Creek Claim No. 12 Above Lower Discovery, having dredged 721,865 cubic yards of gravel and bed rock during the season. A thawing plant of 1,600 points was operated by two electrically driven pumps which supplied 6,000 gallons of water per minute under a pressure of thirty pounds at the points.

Dredge *New North West No. 2* commenced digging on May 24, on Creek Claim No. 243 Below Lower Discovery on Dominion creek, and closed down on Creek Claim No. 253, having dredged 465,137 cubic yards during the season. A thawing plant of 1,000 points was operated and an area of 53,932 square yards thawed during the season.

Export tax on gold recovered and shipped out of the territory was paid to the amount of $5,379.61. An average of eighty-eight men was employed over a period of seven months.

Other Placer Operations.—Many individuals and miners working in partnership were engaged in placer mining and experienced a successful season. Prospecting leases were issued on Thistle creek, and it is anticipated that work will be commenced on them this summer.

LODE MINING

Dawson District.—Development work has been continued on the Lone Star group of claims on Victoria gulch, and the showing was very satisfactory. No ore was shipped, but additional capital has been obtained and it is intended to prosecute development vigorously during the coming year. Claims on the Fifteenmile, on the Yukon river, on Eldorado creek, on Little Twelvemile, and on Gold Run are still being held, but no extensive work has been done. No development work has been done on the Indian River conglomerate, but there are several claims being held with the hope of obtaining capital for development.

Mayo District.—Keno Hill still continues to be the principal producer in this district. The chief operator is the Treadwell Yukon Company, Limited. This company mined some 45,500 tons of ore. The mill operated 94·4 per cent of the total time and produced 382 tons of concentrates for the Treadwell Yukon Company, Limited, and 4,500 tons on the "Sadie" lease. They shipped altogether some 5,100 tons of ore, the gross value of which was $1,800,000, and in addition were instrumental in shipping some 1,375 tons for individuals. The 1929 shipments promise to be even larger, and it is estimated that a total of 7,600 dry tons will be shipped having a gross metal valuation of over two and one-half million dollars.

New Construction.—During the past year a new 240-h.p. Diesel engine has been installed to supply power for additional motors, also a wire rope tram 4,455 feet long, with the necessary loading and discharging terminals, was built connecting the "Lucky Queen" No. 2 shaft with the mill on the "Ladue"

claim. The company also acquired the right to purchase two additional groups of claims on Galena hill, so that they now have a total area of 1,383 acres divided into four separate groups of claims. In the Beaver River district prospecting and developing are being continued by individuals as well as The Consolidated Smelting and Mining Company. This company had five men working for three months last summer preparing sites for drill work. A diamond drill and equipment has been freighted to McKay hill where work is to be started this spring in an effort to determine the value of the ore body at the one thousand-foot level.

The outlook for lode mining in the territory is very bright. The ore shipments from the Mayo district are increasing every year, and more prospecting and developing of individual properties is being done than ever before. Several outfits are getting ready to go by aeroplane to different parts of the territory, which were formerly practically inaccessible by ordinary methods of transportation. They will spend the summer months in prospecting.

COAL

The Five Fingers Coal Company operated their mine during the year and shipped considerable tonnage to Dawson.

TIMBER AND GRAZING LANDS

There was a small decrease in revenue from timber, grazing and hay lands of $3,586.66, as compared with the previous year, but in the latter period ended March 31, 1928, there was an exceptionally large bonus of $105,000 received in the sale of three timber berths. Business has therefore been on a high level during the past fiscal year. In fact, the revenue was over $192,000 greater than the year ended March 31, 1927. The comparative statement of revenue from 1918 to 1928, inclusive, shows the revenue to have grown from $569,607 to $1,386,391.91 since the end of the war period.

Timber berths covered an area of 6,369 square miles and grazing leaseholds 7,199,891 acres. While the berths showed a small decrease of 98 square miles, the grazing leaseholds showed an increased area of nearly 473,000 acres. During the year 80 new berths were granted, and 855 were operated out of a total of 1,412.

There were decreases in the quantities of timber manufactured, owing partly to the building requirements in the Prairie Provinces not being so heavy as in the previous year. One noticeable decrease is that of over 50,000 cords of pulpwood, on account of the somewhat excessive supply in the previous year, the consequence being that the mills had to reduce their purchases until the oversupply was absorbed. This condition will adjust itself, and the coming season will, no doubt, show renewed activity in pulpwood, mining timber, and cordwood operations, particularly in view of the large influx of mining prospectors and settlers to northern Manitoba.

The largest revenue from timber was received through the New Westminster agency, amounting to $404,109, the Edmonton agency being second with the amount of $324,131. The former showed a decrease of about $11,000, and the latter an increase of over $65,000.

The steady increase in grazing business is shown by the additional area of nearly half a million acres under leasehold.

REVENUE

Comparative Statement of Revenue

Year	Revenue $ cts.	Year	Revenue $ cts.
1918	569,607 39	1924	883,726 90
1919	516,938 53	1925	958,136 62
1920	687,401 83	1926	1,109,013 05
1921	807,119 23	1927	1,193,905 20
1922	723,322 81	1928	1,389,978 57
1923	886,064 37	1929	1,386,391 91

Details for Fiscal Year 1928-29

Timber—		
Bonus under licence	$ 125,828 75	
Rent under licence	72,336 14	
Royalty under licence	556,020 98	
Permit fees, dues and rentals	419,680 45	
Seizure dues	18,719 68	
Licence fees	1,266 85	
Scaling fees	16,669 61	
Scale books	35 25	
Total for timber		$ 1,210,557 71
Grazing, Hay, etc.—		
Grazing	$ 150,429 67	
Hay	6,986 57	
Registration fees	2,764 31	
Improvements	15,653 65	
Total for grazing, hay, etc		175,834 20
Total revenue		$ 1,386,391 91

TIMBER

The areas of timber berths held under licence and under permit were as follows:—

Province	Square miles under licence	Square miles under permit
Manitoba	1,031·46	1,165·14
Saskatchewan	745·39	126·83
Alberta	1,235·42	400·06
British Columbia	1,603·37	61·28
	4,615·64	1,753·31

During the year there were 401 new berths granted, as follows: 30 licence, 38 permit, 122 fire-killed, 50 portable saw-mill, 155 cordwood and 6 fringe.

The total number of berths held under licence and permit was 1,412, this being an increase of 80 berths over the previous fiscal year.

The following statements show the number of berths upon which operations were conducted, and also the quantities of material manufactured and marketed, during the year under review.

Agency	Number of berths upon which operations had been conducted	
	Under licence	Under permit
Calgary	17	53
Edmonton	40	196
Prince Albert	43	103
Winnipeg	31	147
Kamloops	31	50
New Westminster	74	15
Revelstoke	13	42
	249	606

MATERIAL MANUFACTURED AND MARKETED UNDER LICENCE AND UNDER PERMIT

Material	Under licence		Under permit	
	Manufactured	Marketed	Manufactured	Marketed
Lumber.....ft. B.M.	367,211,458	369,767,341	42,245,380	40,228,207
Railway ties..... number	290,277	217,930	871,130	717,752
Laths..... pieces	20,697,557	21,394,412	2,864,200	3,170,982
Shingle bolts..... cords	30,721	31,831	2,434	2,568
Shingles..... pieces	.....	.....	174,000	195,500
Piling, cribbing, etc..... lin ft.	673,834	383,774	35,565	44,821
Telephone poles..... lin. ft.	2,486,801	5,198,635	1,094,191	1,090,621
Mining timber..... lin. ft.	909,182	884,182	520,979	702,549
Fence posts..... number	79,163	154,431	225,183	217,991
Cordwood..... cords	12,951	13,144	16,175	15,214
Slabs, edgings, etc..... cords	67,020	68,666	30	.....
Pulpwood..... cords	1,671	7,816	10,356	16,151
Boxwood..... cords	2,640	2,022	81	49
Mine ties..... number	.....	.....	2,846	2,846
Building logs..... pieces	.....	.....	43,026	43,026

N.B.—When the material sold is in excess of the quantity shown as manufactured, such excess has to be considered as being part of the material manufactured in the previous fiscal year, but not marketed during that year.

Decreases are shown in some of the lines of timber manufactured, but, on the other hand, there was an increase in the total number of berths from 1,332 to 1,412, and an increase of 47 in the number being operated. Business in the timber industry in the West, as stated above during the past fiscal year, was not quite so good as in the previous year, which may account somewhat for the decrease in manufacture.

GRAZING

The total area held under lease as of March 31, 1929, was 7,199,891 acres, comprised in 11,090 leases as follows:—

Province	Number of leases	Area under lease
		acres
Manitoba.....	176	75,105
Saskatchewan.....	6,831	3,464,512
Alberta.....	3,757	3,235,930
British Columbia.....	326	423,344
	11,090	7,199,891

This is an increase of 472,876 acres over the acreage in the previous fiscal year. During the past year 1,905 new leases were issued. The result is that the revenue from leases was increased by about $8,000. Up to the end of the calendar year 1928, the following numbers of live stock were maintained on Dominion Government grazing leaseholds, for which stock returns have been furnished, viz:—Cattle, 254,144; horses, 133,126; sheep, 122,646; goats, 52; hogs, 26; total, 509,994.

ORDNANCE, ADMIRALTY AND PUBLIC LANDS

Since the 1927-28 annual report on Ordnance, Admiralty and Railway lands was written, the work of the branch has been combined with the administration of certain other lands under the title of the Ordnance, Admiralty and Public Lands Division of the Dominion Lands Administration.

The work of the division thus formed includes with certain exceptions the administration of lands coming under the following headings:—

Ordnance and admiralty lands.

Land subsidies for railways.

Rights of way, station grounds, and lands for other railway purposes.
Land and water areas for fur farming.
Fractional quarter sections and accrued areas for sale.
Roadways, ferry grounds, and rights of way for various utilities.
Sites for schools, churches, cemeteries, mills, boom anchorages, wharves, bridges, and for recreation, exhibition, and other purposes.
Townsites and settlements.
Escheat lands and other public lands.

In the first settlement of this country the title to all the lands was in the Crown and grants of land could be made with no thought as to the validity or condition of the title, but as time went on and lands were patented, revested, and entailed in various ways, care had to be observed. Formerly large blocks of land were granted, and homestead and other lands were patented rapidly and without fear of entanglements regarding title, but now the situation is the reverse and questions arise in respect to many of the parcels dealt with, which involve agreements with provincial governments, agreements with railway companies, and transactions of a most varied nature. Formerly large areas could be dealt with in a small fraction of the time which it now takes. The progress of work accomplished under such conditions is not measured by the number or acreage of parcels dealt with, but by the ability of the staff to handle such complicated situations and involved conditions as those in which the lands may now be found. Much of the time and effort of this division is expended in this way.

The administration of ordnance lands has proceeded along the same lines as formerly, namely that of bringing as many parcels under the production of revenue as possible. Progress during the year has been made and new leases have been arranged. It must be remembered that these lands have been in settled portions of the country from the earliest times, and it is not always possible in a short space of time to dispose of lands on which there have been encumbrances for many years and make them revenue-producing at once. However, the number of leases of ordnance parcels entered in the records for the fiscal year is fifty.

An agreement has been consummated between the Department of Railways and Canals and the Department of the Interior, resulting in a definite division of authority in respect to the administration of Rideau Canal lands; and this harmonious arrangement having been reached, each department is now free to deal with all the lands available, with profit to the Dominion. This division has taken preliminary action in placing on a revenue-producing basis the lands which have fallen to the Department of the Interior.

In the development of the ordnance reserves at Turkey Point and Point Edward, some expenditure was made in improving the properties to make them more easy of access, and there is no doubt that the recent disposal of lots in Turkey Point has been due to the money expended there. Of the 113 lots originally laid out at Turkey Point 100 are now under lease. Additional lots have since been surveyed and some of these are also occupied.

The title of the Dominion to the ordnance, admiralty and public lands in British Columbia has been placed in documentary form for use in certain negotiations with the provincial government. This work has involved an examination of many records, including a thorough search in the Dominion Archives and also a search in the British War Office and Admiralty.

The closing out of certain agreements with railway companies on account of land subsidy and railway right-of-way matters has involved a very considerable amount of time in checking up the land accounts and satisfying the various agreements and contracts.

In the cases of the right of way of the Savona and Port Moody section of the Canadian Pacific Railway in British Columbia, and that of the Pembina Branch of the same railway in Manitoba, much difficulty was experienced and time spent in the adjusting of matters of title which had received various degrees of attention over a period of more than forty years, and a definite effort is being made to have these matters satisfactorily and finally dealt with in the near future. It should be noted, however, that the acreage patented is very small and out of all proportion to the amount of work involved in the investigation of the titles and the clearing away of the legal entanglements. A number of patents have been issued and many others are in various stages of completion.

Certain lands earned by the Canadian Northern Railway Company on subsidy account were withheld as indemnity for the performance of certain transportation contracts. During the year about 80,000 acres of these lands were patented to the company, and the work is being proceeded with to conclusion.

In patenting certain lands on account of the land subsidy of the Calgary and Edmonton Railway Company, now a subsidiary of the Canadian Pacific Railway Company, the minerals were withheld. These under-rights are now being patented but as many of the lands were patented by the Crown direct to nominees of the company and are, therefore, affected by agreements between the company and the nominees, the patenting of the under-rights has to be proceeded with slowly and each individual parcel dealt with separately considering the peculiar conditions attached thereto. Not only do the departmental records have to be examined but also the agreements between the company and the nominee. There are about two hundred cases of these parcels. A beginning has been made in issuing patents and the work is now proceeding regularly.

During the year a preliminary balance was taken of the main line subsidy account of the Canadian Northern Railway Company which showed the total area patented on this account to be 2,884,627 acres.

Fur farming, which a few years ago was unknown, has now become a regular industry and considerable departmental business has resulted. Marsh lands and partially submerged areas along the borders of lakes, which up to the present have been held of little or no value, are now in demand for fur farming purposes, as well as are lakes and ponds and the adjacent land areas.

During the fiscal year licences of occupation issued for fur farming purposes numbered 271 and covered an area of 179,906·15 acres. These were made up as follows:—

Province	Number	Acres
Saskatchewan	8	2,119·10
Alberta	263	177,787·05

These licences were issued in the names of the provinces in order that the provincial administrations might sublet the lands to settlers wishing to establish themselves in the fur farming industry, as the supervision of the industry is maintained by the provincial authorities.

Arrears of payments on sales of fractional areas and other lands outstanding for many years, are being collected and patents issued where the sales are completed. In cases where there is no desire on the part of the purchaser to complete the payment, the sale is cancelled and the property made available for other disposition. This work is well under way and the results are already apparent in the cash receipts of the division.

The demand is constant and steadily increasing for fractional quarter-sections of farm lands, sites for schools, mills and cemeteries, and for lands of many and varied purposes which come within the scope of this division.

With few exceptions the revenue of the division is composed of receipts of small amounts which are received principally on account of the lease or sale of small acreages of farming lands, cottage and building sites, and detached parcels of ordnance lands. The lands dealt with in this division are found in all of the provinces of the Dominion with the exception of Prince Edward Island.

The revenue received from the administration of ordnance lands was $24,830.09; in addition this branch received $52,472.74 from the sale and lease of other public or Dominion lands, making the total revenue of the branch $77,302.83. As a whole the work of the division is not revenue-producing for by far the largest portion of the time and effort is taken up, as stated above, with the investigation of the standing of lands, many of which areas are granted free on railway subsidy or right-of-way account or are leased or placed under licence at nominal rentals.

REPORT OF THE FINANCIAL CONTROLLER

SUMMARY of net revenue collected from various sources during the fiscal year, 1928-1929

Statement A	— Dominion Lands	$ 4,070,339 37
" B	— School Lands	2,645,302 42
" C	— Ordnance Lands	24,830 99
" D	— Registrar's Fees	512 50
" E	— Casual Revenue	20,873 82
" F	— Fines and Forfeitures	3,334 93
" G	— Seed Grain and Relief Repayments	413,508 89
		$ 7,178,702 02

Statement H is a recapitulation of Dominion Lands revenue by subheads and Statement I shows a comparison of this revenue with that of last year.

STATEMENT A—Dominion Lands Revenue for the fiscal year 1928-1929

Agency	Agency payments	Head Office payments	Total revenue
	$ cts.	$ cts.	$ cts.
Dominion Lands—			
Calgary	72,896 64	5,327 22	78,223 86
Dauphin	5,863 52	842 72	6,706 24
Edmonton	52,513 65	1,977 52	54,491 17
Grande Prairie	27,038 32	488 32	27,526 64
Kamloops	2,979 44	26 00	3,005 44
Lethbridge	77,578 69	3,087 29	80,665 98
Moose Jaw	537,639 71	66,227 30	603,867 01
New Westminster	8,281 39	25 00	8,306 39
Peace River	33,423 95	729 70	34,153 65
Prince Albert	77,145 20	21,637 78	98,782 98
Revelstoke	1,080 10	4 00	1,084 10
Winnipeg	8,036 87	1,695 35	9,732 22
Miscellaneous	5,263 00	21,519 16	26,782 16
	909,740 48	123,587 36	1,033,327 84
Crown Timber—			
Calgary	89,375 86	3,951 44	93,327 30
Dauphin	19,606 18	119 00	19,725 18
Edmonton	320,864 58	1,020 02	321,884 60
Grande Prairie	6,493 34	97 00	6,590 34
Kamloops	72,439 67	259 79	72,699 46
Lethbridge	41,304 08	12,399 01	53,703 09
Moose Jaw	57,931 53	16,485 23	74,416 76
New Westminster	399,696 58	619 55	400,316 13
Peace River	5,311 63	487 43	5,799 06
Prince Albert	127,176 98	2,437 94	129,614 92
Revelstoke	23,828 44	245 10	24,073 54
Winnipeg	183,402 20	839 33	184,241 53
	1,347,431 07	38,960 84	1,386,391 91

STATEMENT A—Dominion Lands Revenue for the fiscal year 1928-1929—*Con.*

Agency	Agency payments	Head Office payments	Total revenue
	$ cts.	$ cts.	$ cts.
Forestry—			
Alberta Inspectorate	63,766 47	1,407 00	65,173 47
British Columbia Inspectorate	16,717 79	7,815 68	24,533 47
Manitoba Inspectorate	31,059 57	179 50	31,239 07
Saskatchewan Inspectorate	94,161 39	2,202 34	96,363 73
Indian Head Nursery Station	4,969 70	.....	4,969 70
Forest Products Laboratory, Vancouver	.....	945 02	945 02
Miscellaneous	.....	41 04	41 04
	210,674 92	12,590 58	223,265 50
Water Power and Reclamation—			
Calgary	1,204 26	780,08	1,984 34
Edmonton	165 28	249 50	414 78
Grande Prairie	115 15	.....	115 15
Lethbridge	.....	7,776 45	7,776 45
Moose Jaw	50 00	10 58	60 58
New Westminster	.....	8 38	8 38
Prince Albert	29 95	5,391 81	5,421 76
Winnipeg	.....	78,992 89	78,992 89
	1,564 64	93,209 69	94,774 33
Mining—			
Calgary	253,106 08	60,189 94	313,295 57
Cold Lake	35,586 08	151 00	35,737 08
Dauphin	577 60	292 00	869 60
Edmonton	164,594 12	57,584 21	222,178 33
Grande Prairie	592 48	.....	592 48
Kamloops	585 23	107 65	692 88
Lethbridge	186,844 99	55,601 15	242,446 14
Moose Jaw	16,143 03	12,376 78	28,519 81
New Westminster	3,394 23	128 19	3,522 42
The Pas	110,540 56	1,076 76	111,617 32
Peace River	645 25	306 83	952 08
Prince Albert	18,883 87	4,193 44	23,077 31
Revelstoke	36 80	.....	36 80
Winnipeg	67,729 23	823 63	68,552 86
Miscellaneous	.....	947 00	947 00
Unorganized Territory	.....	544 00	544 00
	859,259 55	194,322 13	1,053,581 68
National Parks of Canada—			
Antelope	.....	384 00	384 00
Brereton Lakes	.....	10 00	10 00
Buffalo	1,064 20	27,155 96	28,220 16
Elk Island	147 85	1,186 75	1,334 60
Fort Anne	.....	6 00	6 00
Glacier	129 14	51 00	180 14
Jasper	29,922 24	20 15	29,942 39
Lake Florence	.....	60 00	60 00
Kootenay	13,689 49	40 15	13,729 64
Point Pelee	.....	599 37	599 37
Prince Albert	379 77	.....	379 77
Rocky Mountains	149,046 96	1,912 64	150,959 60
Waterton Lakes	5,297 08	187 00	5,484 08
Yoho	2,681 67	462 50	3,144 17
Vidals Point	.....	72 00	72 00
Historic sites	.....	33 00	33 00
Miscellaneous	.....	74 00	74 00
	202,358 40	32,254 52	234,612 92
Northwest Territories—			
Fort Smith	4,082 32	52,580 19	56,662 51
Yukon Territory—			
Dawson	64,123 38	.....	64,123 38
White Horse	5,539 24	.....	5,539 24
	69,662 62	.....	69,662 62
Total revenue	3,604,774 00	547,505 31	4,152,279 31
Less refunds	.....	.....	81,939 94
Net revenue	.....	.....	4,070,339 37

STATEMENT B—School Lands Revenue for the fiscal year 1928-29

Province	Gross revenue	Refunds	Net revenue
	$ cts.	$ cts.	$ cts.
Manitoba	58,436 56	598 02	57,838 54
Saskatchewan	1,378,744 85	2,515 17	1,376,229 68
Alberta	1,224,210 93	12,976 73	1,211,234 20
	2,661,392 34	16,089 92	2,645,302 42

STATEMENT C—Ordnance Lands Revenue for the fiscal year 1928-29

Fiscal year	Gross revenue	Refunds	Net revenue
	$ cts.	$ cts.	$ cts.
1928-29	24,858 19	28 10	24,830 09

STATEMENT D—Registration Fees for the fiscal year 1928-29

Registration district	Gross revenue	Land assurance	Net revenue
	$ cts.	$ cts.	$ cts.
Yukon Territory	545 29	40 29	505 00
Northwest Territories	8 20	0 70	7 50
	553 49	40 99	512 50

STATEMENT E—Casual Revenue for the fiscal year 1928-29

Fiscal year	Gross revenue	Refunds	Net revenue
	$ cts.	$ cts.	$ cts.
1928-29	21,665 53	791 71	20,873 82

STATEMENT F—Fines and Forfeitures for the fiscal year 1928-29

Authority for penalty	Gross revenue	Refunds	Net revenue
	$ cts.	$ cts.	$ cts.
Dominion Parks Regulations	2,244 00	30 00	2,214 00
Forestry Regulations	220 00	.....	220 00
Migratory Birds Convention Act	564 93	.....	564 93
Northwest Territories Act	445 00	75 00	370 00
Northwest Game Act	35 00	100 00	−65 00
Criminal Code of Canada	31 00	.....	31 00
	3,539 93	205 00	3,334 93

STATEMENT G—Seed Grain and Relief Repayments for the fiscal year 1928-29

Year	Gross collections		Refunds		Net revenue	
	Principal	Interest	Principal	Interest	Principal	Interest
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
1876	58 21	210 39	.....	.....	58 21	210 39
1886-7-8	104 59	262 27	.....	.....	104 59	262 27
1890-1	96 00	179 17	.....	.....	96 00	179 17
1894	8 10	4 46	.....	.....	8 10	4 46
1895	86 62	114 47	.....	.....	86 62	114 47
1896	33 54	190 04	.....	113 70	33 54	76 34
1900	2 61	12 39	.....	.....	2 61	12 39
1908	746 68	851 86	101 60	104 11	645 08	747 75
1909	10 05	9 60	.....	.....	10 05	9 60
1911	1,148 31	904 08	.....	3 40	1,148 31	900 68
1912	1,612 02	1,219 44	.....	52 08	1,612 02	1,167 36
1913	716 86	565 38	40 20	57 40	676 66	507 98
1914	1,647 95	1,114 44	.....	.....	1,647 95	1,114 44
1915	141,288 67	103,229 78	1,727 16	2,126 73	139,561 51	101,103 05
1917	2,689 58	1,398 32	70 64	1 24	2,618 94	1,397 08
1918	12,025 41	7,716 87	76 15	55 30	11,949 26	7,661 57
1919	14,439 60	14,336 94	27 75	377 79	14,411 85	13,959 15
1920	16,933 64	14,070 18	163 84	333 59	16,769 80	13,736 59
1921	3,033 32	1,766 16	81 29	94 51	2,952 03	1,671 65
1922	2,358 15	1,259 67	55 03	35 40	2,303 12	1,224 27
1925	1,558 89	622 80	22 50	164 85	1,536 39	457 95
1926	177 45	47 34	.....	26 62	177 45	20 72
Relief prior to 1915	217 34	209 30	.....	.....	217 34	209 30
Relief 1920-28	57,385 40	15,127 41	2,604 81	1,775 17	54,780 59	13,352 24
	258,378 99	165,422 76	4,970 97	5,321 89	253,408 02	160,100 87

STATEMENT H—Cash Receipts on Account of Dominion Lands Revenue for the fiscal year 1928-1929

Source of revenue	Gross receipts	Refunds	Net revenue
	$ cts.	$ cts.	$ cts.
Homestead fees	161,890 00	350 00	161,540 00
Improvements	81,566 66	38,278 85	43,287 81
Sales of land	785,661 29	3,711 51	781,949 78
Map sales, rentals, office fees, etc	61,020 73	3,913 79	57,106 94
Liquor permits, game licences, fur sales, etc	52,049 54	951 44	51,098 10
Timber dues	1,395,725 57	21,183 98	1,374,541 59
Grazing leases and hay permits	180,207 22	4,742 67	175,464 55
Irrigation and water power	67,859 76	9 35	67,850 41
Coal, petroleum, mining fees, etc	1,101,816 65	3,969 75	1,097,846 90
National Parks of Canada	234,612 92	860 00	233,752 92
Miscellaneous	29,868 97	3,968 60	25,900 37
	4,152,279 31	81,939 94	4,070,339 37

STATEMENT I—Gross Receipts on Account of Dominion Lands Revenue compared with the previous fiscal year

Particulars	1928-1929	1927-1928	Increase
	$ cts.	$ cts.	$ cts.
Dominion Lands	1,033,327 84	880,580 17	152,747 67
Crown Timber	1,386,391 91	1,389,978 57	*3,586 66
Forestry	223,265 50	206,630 36	16,635 14
Water Power and Reclamation	94,774 33	66,667 14	28,107 19
Mining	1,053,581 68	†837,075 07	216,506 61
National Parks of Canada	234,612 92	275,342 59	*40,729 67
Northwest Territories	56,662 51	47,021 36	9,641 15
Yukon Territory	69,662 62	60,113 30	9,549 32
	4,152,279 31	3,763,408 56	388,870 75

* Decrease. † Including $480 scrip.

II

MINING SUPERVISION AND INSPECTION

REPORT OF THE SUPERVISORY MINING ENGINEER, C. C. ROSS

General

The year has been a very busy one for not only have the offices in Ottawa and The Pas had to be organized and the Calgary office extended to cope with the ever growing demands made on it by operators for advice and by increase in field developments calling for supervision, but the Quartz Mining Regulations had to be drastically revised to meet the needs of the mining operations now in progress on very important complex low grade ore bodies of the North. The aim of the branch in the newer fields of activity is to establish the same harmonious co-operation with the operators that has been achieved in Calgary and Estevan. In the case of the area served by The Pas office, there are fewer complications in the development of mines due to divided ownership of the mineral rights. In the petroleum and natural gas areas in Alberta, this feature has to receive careful consideration and were it not for the co-operation between the branch and the various lessors and lessees generally, the efficiency of the enforcement of the technical provisions of the regulations would be much impaired; a matter clearly of great moment when dealing with such minerals as petroleum oil and gas and with the ever-menacing encroachment of water. This co-operation it has always been the policy of the department to encourage and maintain and it is gratifying to be able to record that cordial relations exist between all parties and that many individual owners of mineral rights insert in the leases with their lessees that operations shall be carried on in accordance with Department of the Interior regulations, thus ensuring uniformity of conservation measures and adequate recording of the results obtained. It should be stressed that in the case of rapidly developing industries like metal mining in Manitoba, Saskatchewan and the Northwest Territories and petroleum and natural gas extraction in Alberta, both under conditions that present engineering problems that are peculiar to the districts under development, the regulations require to be kept in a fluid state, so that neither present operations may be unduly hampered nor the aims of rational conservation lost sight of. So long as this aspect of the functions of the branch is kept clearly in view and respected by operators, there are obvious advantages in the supervision being through the media of regulations as opposed to acts, which call for more rigid adherence to their provisions and are less readily brought into line from time to time with the needs created by the growth of the industries concerned.

The nature of the supervision exercised being mainly associated with the idea of conservation, in other words having for its object the rational exploitation of the minerals concerned with the least wasteful methods, calls for engineers who have wide experience in the class of operations they deal with. As the objects of the supervision are largely identical with the best interests of the operators, it has come about that the information acquired by our engineers from their field work is becoming more and more recognized by the operators as of service to them in the successful carrying out of their work. For example, the study of the sediments penetrated by wells, or of the oil, gas, and water

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encountered, is a necessary part of the work of our engineers and is carried out in special laboratories established for the purpose, but the results obtained are also of use to operators in arranging their casing programs, particularly when such information is quickly available. Similarly, information that is not gathered at the time mining operations are carried out is often lost or becomes so indefinite as to have little value to the practical man.

At the request of the Department of Indian Affairs, whose Petroleum and Natural Gas Regulations are on parallel lines to those of this department, the engineers of the Calgary office carry out similar duties on the Stoney, Sarcee and Blood Indian reserves.

Oil and Gas

For a period after the completion of Royalite No. 4 in 1924 many sceptical statements were made respecting this well, the principal being that the flow of wet gas was a "freak" and would be of short duration. Further, that other producing wells of this kind would not be discovered in the Turner Valley area.

This well has now been in production four and a half years, and from the production returns shows no falling off in output, thus confounding all the pessimistic forecasts. Other wells have also been completed to the same productive horizon with satisfactory results. These new wells are all located at some distance from No. 4, consequently proving that the productive horizon extends over a considerable area. Immediately this latter fact was appreciated, an ever-increasing interest developed in oil and gas prospecting. Most of this new development work has been centered in and around the Turner valley, but outside areas have also come in for a fair amount of attention, and it is certain that with the expansion and development in prospecting a considerable increase in geological knowledge will be available, while at the same time the proven oil territory will be considerably extended.

The location of suitable structure on the plains, by means of shallow well drilling has met with satisfactory results at several points widely separated, resulting in the location and starting of several deep-test exploratory wells, while others are projected. These wells, located after careful sub-surface surveys, should materially assist in opening up areas so far unknown, owing to outcrops of strata being covered with a thick covering of glacial drift. In northern Alberta a deep test was drilled in township 76, range 5, west of the 5th meridian, but was abandoned at 3,105 feet, although several indications of oil and gas were encountered. A deep test was also started in township 89, range 3, west of the 4th meridian. Work, however, had to be suspended at 495 feet early in the winter. Other work in this area was the drilling of several shallow wells in townships 88 and 96 to test the tar sands at distance from the outcrops.

At Viking a well was completed in township 49, range 13, west of the 4th meridian, and brought in, at 2,165 feet, a producing well. In the same field a deep test was drilled to 3,039 feet, but was abandoned, although good indications of gas and heavy oil were encountered. At Fabyan a well drilled in township 45, range 8, west of the 4th meridian, to 1,778 feet met good oil and gas shows, but work had to be suspended when winter set in. Further east an old well was brought in, this being a prolific oil and gas well at 2,072 feet. This, however, was cased off, and the well is being further deepened to test lower horizons. In proximity to this, two other wells were drilled to 2,034 and 2,072 feet respectively. The first encountered a large volume of gas which is now shut in. The second had a good oil show, but is not active at present.

To the north of the town of Wainwright a small producer was brought in at 2,247 feet. This well is now in production and the products are being sold to a small refinery located in the vicinity.

In township 43, range 3, west of the 4th meridian, a prospect well drilled near Dunn to 2,433 feet passed through several oil horizons, which at the end of the year were being tested.

Northeast from the latter location the old Advance No. 3 located in township 45, range 1, west of the 4th meridian, entered a good gas sand at 1,820 feet. Water, however, caused trouble and it had to be cemented off. The work of cleaning the well is now in progress, and it is expected, if the cementation has been satisfactory, that the productive gas will be brought back.

Work in southern Alberta proved the extension of the Skiff pool. Further wells are projected for this district. These, it is anticipated, will prove a considerable extension of the productive area.

To the east of Skiff and south of Medicine Hat a test well drilled in the Cypress hills encountered a big flow of gas at 3,340 feet. Water, however, unfortunately appeared simultaneously with the gas, and owing to the low temperature prevailing at the time, resulted in a thick covering of ice gathering all around the derrick and extending for the full height of the latter. The well was, after some difficulty, got under control and all work was suspended, pending more suitable weather conditions. Work has now been resumed and interesting developments here may be expected during the coming season.

At Pincher Creek, southwestern Alberta, three deep tests were drilled, unfortunately with negative results owing to the disturbed underground geological conditions. These tests have been abandoned, and the operating company have transferred to another area to the northeast.

As was to be expected, the bulk of development work was concentrated in the Turner valley, and it is this area which has given the greater portion of the increase in oil production. The outstanding development during the year was the completion of a well in this district at 5,040 feet, where a big flow of wet gas was encountered, definitely proving that the western flank of the Turney Valley structure is productive. Later in the year another well was finished at 5,280 feet. This well not only confirmed production on the western flank, but also extended the known productive area in the Limestone three miles further south. This now gives a total proven area in the Turner Valley field of eight miles in length. At present the general trend of operations is to the south, and if these are successful fully another four miles will be proven as petroliferous.

Development has also been started on parallel structure to the west of Turner valley and in the area known as the Waite valley. Here actual underground conditions are unknown, but from surface outcrops the outlook is highly promising for production.

The capacity of the Turner Valley scrubbing plant, for the elimination of sulphur from the spent gas after the removal of the naphtha content, having been further increased, the gas requirements of the city of Calgary were wholly drawn from this area, thus obviating the necessity of the Canadian Western Natural Gas Company drawing on the Foremost and Bow Island fields to any great extent, other than the necessary requirements for Lethbridge and other towns in the southern part of Alberta.

Despite the large quantity of gas for the requirements of Calgary, there has been a large surplus in the Turner valley. This surplus has had to be burned. Experiments are now in progress to conserve the waste gas by forcing it back into the ground. It is, however, feared that these experiments will be unsuccessful, and that the operators will be compelled to find a more practicable method of conserving the waste gas, either by closing in the wells, by finding more extensive markets for the gas, or by conveying the surplus gas to partly depleted areas and using it for repressuring existing wells, if the latter are found suitable for this purpose.

During the year, besides the general inspections carried out by the engineering staff of the Calgary office of the Supervisory Mining Engineer, twenty-three special inspections were made for water-shut-off tests, in accordance with the Petroleum and Natural Gas Regulations. During the period under review a total of 112 deep-test wells were in active drilling. In these a total of 193,555 feet of hole was drilled; the completions were twenty-three mostly centered in the Turner Valley area.

The total production of oil for the fiscal year was as given hereunder. This, on comparison with previous years, shows a satisfactory increase.

	1928-29 barrels	1927-28 barrels
Naphtha	449,347	304,506
Light crude	74,424	49,723
Heavy crude	7,953	4,082
Totals	531,724	358,311

Details of the wells in operation are given below. It will be noted that in Saskatchewan and Manitoba very little work was done during the year. Indications at the moment, however, tend to show that at several points in both provinces several tests may be commenced in the near future.

Alberta

PLAINS AREA

International Petroleums Ltd. No. 2.—Section 30, township 76, range 5, west of the 5th meridian, drilled to a depth of 3,105 feet, encountered some showings of gas, but not in commercial quantities and the well was abandoned.

International Bitumen Co. No. 3.—Legal subdivision 10 of section 36, township 96, range 11, west of the 4th meridian, drilled to a depth of 349 feet; No. 4, legal subdivision 16, of section 29, township 96, range 10, west of the 4th meridian drilled to a depth of 240 feet. Both wells encountered tar sands.

Bituminous Sand Extraction Co.—S.E. ¼ section 24, township 88, range 8, west of the 4th meridian, drilled several holes to a shallow depth and abandoned because of drilling difficulties. One hole attained a depth of 150 feet, encountering tar sand.

P. von Weymarn.—Unsurveyed territory, about township 89, range 3, west of the 4th meridian drilled to a depth of 495 feet, suspended for the winter.

Northwestern Utilities Ltd. No. 15.—Legal subdivision 16, of section 2, township 49, range 13, west of the 4th meridian obtained commercial gas at 2,165 feet. Now in production.

Hudson's Bay Marland Oil Co. Viking No. 1.—S.W. ¼ section 8, township 49, range 12, west of the 4th meridian drilled to 3,039 feet. Oil showings were obtained, but not in commercial quantities and the well was plugged back to the Viking gas sand and finished as a commercial gas well.

Fabyan Petroleums Limited No. 1.—Legal subdivision 8 of section 24, township 45, range 8, west of the 4th meridian drilled during 1926 to 950 feet deepened during year to 1,778 feet, obtaining showings of oil and gas before operations ceased for the winter.

Maple Leaf No. 1.—Legal subdivision 1 of section 24, township 45, range 8, west of the 4th meridian supplying gas to the town of Wainright.

British Petroleums Ltd. No. 3B.—Legal subdivision 4 of section 29, township 45, range 6, west of the 4th meridian and

Edmonton Wainright No. 1.—On the same legal subdivision were pumped regularly most of the year, the oil being treated in small plants in the vicinity.

Wainwell Oils Ltd.—Took over the well of Interior Oil Company as Wainwell No., legal subdivision 9, of section 36, township 44, range 7 west of the 4th meridian at a depth of 2,002 feet and at 2,072 feet obtained oil, but later undertook deepening the well to a lower horizon.

No. 2 was drilled to a depth of 2,034 feet and obtained a large flow of gas and is at present closed in.

No. 3 well, in legal subdivision 9, of the same section obtained oil at a depth of 2,072 feet.

Sasko-Wainwright Oil and Gas Ltd.—Drilled in legal subdivision 1 of section 19, township 45, range 6, west of the 4th meridian to a depth of 2,247 feet obtaining oil and it is expected that the well will shortly be pumped.

Ribstone Oils Ltd. No. 1.—Legal subdivision 1 of section 1, township 46, range 1, west of the 4th meridian. Well abandoned after protracted water troubles, No. 2 well of the same company on legal subdivision 5 of section 24, township 46, range 1, west of the 4th meridian was drilled to a depth of about 2,100 feet by March 31 and operations were continuing. A number of shallow wells were drilled for structure tests as a guide to further deep drilling.

Meridian Oil Co. Limited.—Legal subdivision 3 of section 16, township 45, range 1, west of the 4th meridian took over Advance Oil Company No. 3 as Meridian No. 1 from a depth of 308 feet and at a depth of 1,820 feet struck a very heavy gas flow unexpectedly, which, however, would appear to be only a pocket, as it quickly declined.

London Ribstone Petroleums No. 1.—Legal subdivision 14 of section 10, township 43, range 3, west of the 4th meridian was carried from a depth of 1,500 feet to a depth of 2,433 feet. Several horizons showed oil and were being tested out.

Canadian Western Natural Gas, L. H. & P. Co. Brooks No. 3.—Legal subdivision 14 of section 32, township 18, range 14, west of the 4th meridian drilled to a depth of 1,625 feet obtaining a small commercial flow of gas.

Ontario Alberta Oil Development Company Ltd. No. 1.—Legal subdivision 15 of section 34, township 17, range 8, west of the 4th meridian drilled to a depth of 2,210 feet, and obtained some gas showings before they shut down for the winter.

City of Medicine Hat.—The City of Medicine Hat drilled their No. 46 "Fox Farm" well in legal subdivision 15 of section 26, township 12, range 6, west of the 4th meridian to a depth of 1,120 feet obtaining commercial gas.

Eagle Butte Oil Co. Ltd.—Legal subdivision 3 of section 31, township 7, range 4, west of the 4th meridian carried their well from a depth of 1,000 feet to 3,340 feet where a very heavy gas flow accompanied by water was unexpectedly encountered late in December. The flow was finally controlled, and further operations are to be continued.

Lethalta Oils Ltd. No. 1.—Legal subdivision 5 of section 33, township 8, range 18, west of the 4th meridian was drilled to a depth of 2,261 feet when drilling was suspended for the winter.

Devenish Petroleum No. 2.—Was drilled by Imperial Oils Limited on legal subdivision 11, of section 11, township 5, range 14, west of the 4th meridian, to a depth of 3,171 feet. Small oil show was obtained, but in absence of commercial production the well was abandoned.

Devenish No. 3.—Was drilled by Imperial Oils Limited on legal subdivision 4 of section 27, township 5, range 14, west of the 4th meridian to a depth of 3,061 feet, obtaining some oil. Further testing and deeper drilling are proceeding.

Range Oil and Gas Company No. 2.—(Successors to Canadian Oil and Refining Co., and of Rogers Imperial) Drilled on legal subdivision 6, of section 21, township 1, range 11, west of the 4th meridian to a depth of 990 feet, when operations were suspended.

Commonwealth Petroleums Ltd. No. 1.—Legal subdivision 8, of section 9, township 3, range 15, west of the 4th meridian drilled to a depth of 1,390 feet.

Gas Production and Transportation Ltd.—Legal subdivision 14 of section 21, township 4, range 18, west of the 4th meridian drilled from 3,350 feet to 4,158 feet. Some oil shows were obtained in the Ellis formation and near the top of the Madison. Considerable water was encountered and the well was abandoned.

High River Oil Fields Ltd.—On legal subdivision 11, of section 6, township 19, range 28, west of the 4th meridian had erected a derrick and were partly rigged up at the end of March.

Ranchmen's Gas and Oil Co. Ltd. No. 1.—Legal subdivision 16 of section 13, township 20, range 29, west of the 4th meridian drilled from a depth of 2,500 to about 3,000 feet and at the end of March were making good progress.

Anglesey Lakeview No. 1.—Legal subdivision 1 of section 22, township 21, range 1, west of the 5th meridian was carried from 2,700 feet to 4,500 feet. Operations were suspended in September, and the well was later abandoned.

Twin Dome No. 1.—North half of section 16, township 21, range 28, west of the 4th meridian had some material on the ground but had not at the end of March made a definite location.

Alberta Gas and Fuel Co. Ltd.—Waterton No. 1.—Legal subdivision 3 of section 34, township 2, range 29, west of the 4th meridian was drilled to a depth of 4,605 feet. A small gas show was encountered at depth, but in absence of favourable geological conditions, the well was abandoned.

Castle No. 1 Well.—Was drilled by the same company on legal subdivision 2 of section 11, township 6, range 1, west of the 5th meridian to a depth of 3,310 feet, and in absence of favourable geological conditions the well was abandoned.

Drywood No. 1 Well.—Was drilled by the same company on legal subdivision 9, of section 14, township 4, range 30, west of the 4th meridian to a depth of 4,095 feet and was also abandoned on account of geological conditions.

Mount Royal Oil Co. Ltd. No. 1.—Legal subdivision 3 of section 7, township 6, range 1, west of the 5th meridian was taken over by the Weymarn Oils and at the close of the fiscal year a start was being made by the latter company to resume operations.

FOOT-HILLS AREA OUTSIDE TURNER VALLEY

Elbow Oils Ltd. No. 1.—Legal subdivision 11 of section 35, township 22, range 5, west of the 5th meridian have erected a derrick, rigged up and at the end of March were about ready to start drilling.

Moose Dome Oils Ltd.—On legal subdivision 12 of section 28, township 22, range 6, west of the 5th meridian had some equipment on the ground, but had not made much progress in the erection of a rig at last report.

Signal Hill Oil Co. No. 2.—Legal subdivision 9 of section 34, township 23, range 5, west of the 5th meridian carried their well from 1,950 feet to 2,700 feet during the year.

Imperial Oils Ltd. Bow River No. 2.—Legal subdivision 11 of section 31, township 24, range 4, west of the 5th meridian drilled to a depth of 2,375 feet and operations were proceeding at the end of March.

Frontier Developments No. 1.—Legal subdivision 2 of section 9, township 27, range 5, west of the 5th meridian drilled to a depth of 875 feet.

MORLEY INDIAN RESERVE

Melbourne Oils Ltd.—Near the Morley bridge. This company deepened the well, put down by Reserve Oils from about 1,900 to 1,970 feet. Further operations were in prospect.

Gold Coin Oils.—No further operations were carried on during the year, but the property was taken over by Rockland Oils, and there is some prospect of further operations at this or another site.

Wabash Oil Co. No. 1.—Carried their well from 1,100 feet to 2,071 and were shortly to resume operations. Numerous shows of gas and water were encountered in limestone formation.

Sinclair Morley Oil Structures "Norcon No. 1."—Was "spudded in" and operations suspended. Further operations are in prospect.

SARCEE INDIAN RESERVE

Sarcee Oil and Development Co. Limited.—Drilled two structure test holes to an aggregate depth of 776 feet.

TURNER VALLEY AND VICINITY

Advance Oil Co. Ltd. No. 5.—Legal subdivision 16 of section 19, township 19, range 2, west of the 5th meridian, attained a depth of about 3,000 feet, and drilling was proceeding.

Associated Oils, "Northwest Associated No. 1."—Legal subdivision 6, of section 20, township 19, range 2, west of the 5th meridian, was drilled to a depth of 4,530 feet, and operations were actively proceeding at the end of March.

British Dominion Oil and Development Co. No. 2.—In north half legal subdivision 6 of section 12, township 20, range 3, west of the 5th meridian, reached a depth of about 3,800 feet and drilling was proceeding. Oil shows were encountered and a little light crude produced, but the production was not considered commercial after a fair test.

Calmont Oils Ltd. No. 1.—Legal subdivision 2 of section 1, township 20, range 3, west of the 5th meridian was carried from 5,200 to 5,650 feet, when protracted fishing difficulties made necessary repeated shooting and cleaning out. Commercial production had not been obtained at the end of March, but operations were continuing.

Dalhousie No. 6.—Legal subdivision 10 of section 3, township 20, range 3, west of the 5th meridian. Drilling was carried from 4,850 to 5,593 feet where it was completed as a small naphtha producer.

Dalhousie No. 7.—In legal subdivision 9 of section 30, township 19, range 2, west of the 5th meridian, was being rigged up at the end of March.

East Crest Oil Co., No. 1.—In Legal subdivision 5 of section 16, township 19, range 2, west of the 5th meridian drilled to a depth of 3,725 feet and operations were continuing. Several gas shows have been obtained.

Foothills Oil and Gas Co. Ltd No. 1.—Legal subdivision 4, section 26, township 20, range 3, west of the 5th meridian, drilled from 3,498 to 5,914 feet where the well was completed as a producer of naphtha and gas.

Foothills, No. 2.—Legal subdivision 8 of section 1, township 20, range 3, west of the 5th meridian, drilled from 2,300 feet to 2,840 feet, where oil was produced for several months. Later deepened to 3,707, where oil was obtained at a second horizon. The rig was burned and the well produced for a time. At the end of March the well was again being deepened and had reached a depth of 3,787 with operations being actively carried on toward reaching the lime.

Foothills No. 3.—Legal subdivision 16, section 8, township 19, range 2, west of the 5th meridian, being drilled for Southwest Petroleums, had reached a depth of 1,294 feet and operations were proceeding rapidly.

Foothills No. 4.—Legal subdivision 1, section 26, township 20, range 3, west of the 5th meridian, was located and preliminary operations were proceeding.

Freehold Oil Corporation No. 1.—Legal subdivision 4, of section 3, township 21, range 3, west of the 5th meridian, was drilled to a depth of 2,535 feet. Gas was obtained, which could not readily be controlled, resulting in a fire. Accidents and fishing operations subsequent to the fire held up progress, but work was being actively carried on.

Highwood No. 1.—Legal subdivision 3 of section 36, township 18, range 3, west of the 5th meridian, was carried by diamond drill from 3,624 to 4,152 feet with operations continuing at the end of March.

Home Oil Co. Ltd. No. 1.—Legal subdivision 10 of section 20, township 19, range 2, west of the 5th meridian, produced from "Home Sand" at 4,560 until August, when deepening operations were started. In February at a depth of 5,280 feet a very heavy flow of gas with a high naphtha content was obtained.

Home No. 2.—Legal subdivision 14 of section 20, township 19, range 2, west of the 5th meridian, was drilled from 3,800 feet to 5,158 and produced for several months from "Home" and "Dalhousie" sands. In March deepening operations continued the well to 5,353 feet, and a diamond drill was being rigged up to carry the well into the naphtha zone in the lime.

Home No. 3.—Legal subdivision 10 of section 20, township 19, range 2, west of the 5th meridian, was carried from 200 feet to 5,033. Some gas and oil were encountered, but operations were proceeding to carry the well to the naphtha zone in the lime.

Home No. 4.—Legal subdivision 14 of section 20, township 19, range 2, west of the 5th meridian, had been drilled to 2,830 feet and operations were actively proceeding.

Illinois Alberta Oil Co. Ltd. No. 1.—Legal subdivision 14 of section 12, township 20, range 3, west of the 5th meridian, continued to produce naphtha and gas during the year, having no interruptions to flow such as have occurred in many wells producing from the lime. The rate of production fell somewhat.

Lundy & Freeman No. 1.—On south half of legal subdivision 10 of section 1, township 20, range 3, west of the 5th meridian, reached a depth of about 2,400 feet, and operations were proceeding at the end of March.

McLeod No. 3.—Legal subdivision 15 of section 1, township 3, west of the 5th meridian, was carried to the lime by cable tools. A diamond drill was used to deepen the well in the lime, but owing to a drilling accident at 4,881 feet the deepening has been held up.

McLeod No. 4.—North half of legal subdivision 16, of section 1, township 20, range 3, west of the 5th meridian, started in March, 1928, was drilled to 3,781 feet, where a very heavy gas flow was obtained in the lime, and considerable naphtha. Production was not satisfactory and deepening operations were carried on until at a depth of 4,972 a second naphtha-producing horizon was reached.

Mayland No. 1.—Legal subdivision 10 of section 17, township 19, range 2, west of the 5th meridian, started in March, 1928, reached a depth of 5,235 feet at the end of March, 1929. Some gas and oil was encountered, and one oil horizon may prove to be of commercial proportions, but operations were continuing in an effort to reach the naphtha zone in the lime.

Midfield No. 1.—Northeast quarter legal subdivision 9, of section 1, township 20, range 3, west of the 5th meridian, was started about the middle of March and had reached about 500 feet at the end of the month, with operations actively proceeding.

Mercury Oils Ltd. No. 1.—On legal subdivision 13 of section 4, township 19, range 2, west of the 5th meridian, took over a derrick that had been erected by Dutch American Oils on a Mill City lease. At the end of March a depth of about 200 feet had been attained, and rapid progress was being made.

Model Oils Ltd.—North half of legal subdivision 8 of section 22, township 20, range 3, west of the 5th meridian, drilled to a depth of 4,235 feet, by the end of March, making very good time and having carried 10-inch casing to 4,134 feet.

New Valley Oil Co. No. 1.—Legal subdivision 4 of section 6, township 21, range 2, west of the 5th meridian, was carried from 2,080 to 2,200 feet.

New McDougall Segur No. 2.—Legal subdivision 14 of section 12, township 20, range 3, west of the 5th meridian, was deepened from 2,646 feet to about 5,150 feet by the end of March and drilling was proceeding, the objective being the naphtha zone in the lime.

New McDougall Segur No. 3.—On the same legal subdivision, was carried from 1,850 feet to 3,285 feet, and operations suspended pending completion of No. 2.

New Black Diamond No. 1.—Legal subdivision 1 of section 3, township 20, range 3, west of the 5th meridian. No operations were carried on during the year, but the well was taken over by Weymarn Oils who plan to deepen

Okalta Oils Ltd. No. 1.—Legal subdivision 1 of section 1, township 20, range 3, west of the 5th meridian, was carried from 4,640 feet to 5,040 where a very large production of naphtha and gas was obtained.

Okalta Oils Ltd. No. 2.—Legal subdivision 8 of section 1, township 20, range 3, west of the 5th meridian, was deepened from 2,770 to 3,171, two light crude horizons being encountered. At the end of the fiscal year the well was in production.

Okalta Oils Ltd. No. 3.—South half of legal subdivision 9 of section 1, township 20, range 3, west of the 5th meridian, was drilled to a depth of 2,550 feet and operations were proceeding.

Regent Oil Co. Ltd. No. 1.—Southeast quarter of legal subdivision 16 of section 1, township 20, range 3, west of the 5th meridian, was carried from 2,475 feet to 3,870 feet where production of naphtha and gas was obtained.

Royalite Oil Co. Ltd. No. 1.—Legal subdivision 14, of section 6, township 20, range 2, west of the 5th meridian, produced a small amount of naphtha and low pressure gas, but was closed in when the gas supply exceeded demand.

Royalite Oil Co. Ltd. No. 2.—Legal subdivision 11 of section 6, township 20, range 2, west of the 5th meridian, was closed in throughout the year.

Royalite Oil Co. Ltd. No. 3.—Legal subdivision 16 of section 6, township 20, range 2, west of the 5th meridian, produced gas except during the summer, when the well was closed in.

Royalite Oil Co. Ltd. No. 4.—Legal subdivision 12 of section 7, township 20, range 2, west of the 5th meridian, continued to produce naphtha and gas in apparently undiminished quantities.

Royalite Oil Co. Ltd. No. 6.—Legal subdivision 16 of section 31, township 19, range 2, west of the 5th meridian, was carried from 4,280 feet to 4,531 feet, where a large production of naphtha and gas was obtained.

Royalite Oil Co. Ltd. No. 7.—Legal subdivision 3 of section 13, township 20, range 3, west of the 5th meridian, continued to produce naphtha and gas throughout the year without interruption and with no marked decrease in amount.

Royalite Oil Co. Ltd. No. 8.—Legal subdivision 15 of section 12, township 20, range 3, west of the 5th meridian, was completed as a large producer of naphtha and gas at 3,753 feet.

Royalite Oil Co. Ltd. No. 9.—Legal subdivision 14 of section 13, township 20, range 3, west of the 5th meridian, was carried from 3,700 feet to completion at 5,593 feet. Gas and naphtha are being produced.

Royalite Oil Co. Ltd. No. 10.—Legal subdivision 10 of section 12, township 20, range 3, west of the 5th meridian, continued as a producer of light crude.

Royalite Oil Co. Ltd. No. 11.—Legal subdivision 10 of section 12, township 20, range 3, west of the 5th meridian, was carried from 1,700 feet to completion at 2,474 as a producer of light crude.

Royalite Oil Co. Ltd. No. 12.—Legal subdivision 3 of section 13, township 20, range 3, west of the 5th meridian, was drilled to 3,840 feet, and operations were continuing at the end of March with the naphtha zone as objective. Small oil shows were encountered and some production obtained.

Royalite Oil Co. Ltd. No. 13.—Legal subdivision 6 of section 13, township 20, range 3, west of the 5th meridian, was drilled to production at 4,946 feet. Gas and naphtha were obtained.

Royalite Oil Co. Ltd. No. 14.—Legal subdivision 4 of section 7, township 20, range 2, west of the 5th meridian, was drilled to production in the lime at 3,656 feet. Gas and naphtha are being produced.

Royalite Oil Co. Ltd. No. 15.—Legal subdivision 1 of section 12, township 20, range 3, west of the 5th meridian, was drilled to production of light crude at 3,047 feet.

Royalite Oil Co. Ltd. No. 16.—Legal subdivision 2 of section 12, township 20, range 3, west of the 5th meridian, was drilled to a depth of 5,060 feet and at the end of March was on a production test with prospect of deeper drilling.

Royalite Oil Co. Ltd. No. 17.—Legal subdivision 13 of section 6, township 20, range 2, west of the 5th meridian, was drilled to completion in the lime at 3,965 feet.

Royalite Oil Co. Ltd. No. 18.—Legal subdivision 13 of section 12, township 20, range 3, west of the 5th meridian, was drilled to completion in the lime at 3,887 feet, producing gas and naphtha.

Royalite Oil Co. Ltd. No. 19.—Legal subdivision 5 of section 6, township 20, range 2, west of the 5th meridian, was drilled to a depth of 4,110 feet, with operations continuing at the end of March.

Royalite Oil Co. Ltd. No. 20.—Legal subdivision 7 of section 12, township 20, range 3, west of the 5th meridian, was drilled to a depth of 3,174 feet by the end of March, with operations continuing. Some light crude production had been obtained.

Royalite Oil Co. Ltd. No. 21.—Legal subdivision 1 of section 13, township 20, range 3, west of the 5th meridian, was drilled to about 3,350 feet, with operations continuing at the end of March.

Royalite Oil Co. Ltd. No. 22.—Legal subdivision 8 of section 12, township 20, range 3, west of the 5th meridian, was drilled to a depth of 2,250 feet with some oil shows. The well was intended as a means of storing surplus gas in a sand. Up to the end of March no test of the well for gas storage had been made.

Royalite Oil Co. Ltd. No. 23.—Legal subdivision 13 of section 31, township 19, range 2, west of the 5th meridian, was started late in February and at the end of March had attained a depth of about 1,500 feet.

Seneca Oils Ltd. No. 1.—Legal subdivision 1 of section 34, township 20, range 3, west of the 5th meridian, was carried from 3,700 feet to 4,930 feet, where operations were suspended. Some oil and gas was encountered.

Sentinel Oil Co. Ltd. No. 1.—Legal subdivision 15 of section 8, township 20, range 2, west of the 5th meridian, carried hole from 3,700 feet to 4,615 feet where it was suspended.

Spooner Oils Ltd. No. 1.—On legal subdivision 12 of section 13, township 20, range 3, west of the 5th meridian, was deepened from 4,950 to 5,230 feet and has been producing gas and naphtha.

Spooner Oils Ltd. No. 2.—Legal subdivision 14 of section 13, township 20, range 3, west of the 5th meridian, was drilled to 5,080 feet by cable tools and by diamond drill to 5,160 by the end of March, with operations continuing.

Stockmen's No. 2.—Legal subdivision 7 of section 27, township 20, range 3, west of the 5th meridian, drilled to 2,880 feet, when operations were suspended.

United Oils Ltd. No. 4.—Legal subdivision 2 of section 24, township 20, range 3, west of the 5th meridian, was drilled to 5,377 feet. Light crude oil flowing by heads was responsible for a fire that burned the derrick. Repairs were proceeding at the end of March and light crude production was at the same time being obtained.

Vulcan Oil Co. Ltd. No. 2.—Legal subdivision 11 of section 13, township 20, range 3, west of the 5th meridian. Operations were suspended throughout the year on account of drilling accident.

Warner Oils No. 1.—Legal subdivision 3 of section 28, township 18, range 3, west of the 5th meridian. Operations were commenced by the McLaren Oil Company but were suspended before a depth of 100 feet was attained, and the well was taken over later by the first-named company, who contemplate further drilling.

Saskatchewan

Big Six Oil Co. Ltd. No. 1.—Legal subdivision 16 of section 18, township 19, range 2, west of the 3rd meridian, was carried from 85 feet to 154 feet.

Gas Production and Transportation Ltd.—Legal subdivision 8 of section 28, township 30, range 5, west of the 3rd meridian, were preparing to make a diamond drill test.

Pike Lake Oil and Gas Development and Exploration Co. Ltd.—Legal subdivision 8 of section 13, township 34, range 7, west of the 3rd meridian, had rigged up and spudded in by the end of March.

Detta & Gessell.—Legal subdivision 15 of section 26, township 21, range 29, west of the 2nd meridian, drilled to a depth of 227 feet and suspended operations.

Rosetown Lease Holding and Development Co. No. 1.—Legal subdivision 13 of section 4, township 31, range 17, west of the 3rd meridian, carried their hole from 225 feet to 2,034 feet, when they shut down for the winter. Some gas and oil showings were obtained.

Unity Valley Oil Co. Ltd. No. 2.—Legal subdivision 12 of section 14, township 41, range 24, west of the 3rd meridian, drilled to a depth of 3,201 feet before shutting down for the winter. A little oil and gas show had been obtained.

Eden Valley Oil Co. Ltd.—Section 35, township 28, range 8, west of the 3rd meridian, rigged up and spudded in.

Simpson Oil Co. Ltd. No. 1.—Legal subdivision 2 of section 9, township 29, range 25, west of the 2nd meridian, carried their hole from 1,371 to 2,170 feet and were engaged in fishing operations at the end of the fiscal year.

Associated Securities Ltd.—Drilled two holes for structure test in township 7, ranges 28 and 29, west of the 2nd meridian, with an aggregate depth of 570 feet, and further structure tests were contemplated.

Northwest Territories

No petroleum or natural gas operations were carried out in the Northwest Territories during the fiscal year.

Summary of Operations

SUMMARY OF OPERATIONS DURING YEAR ENDED MARCH 31, 1929

—	Turner Valley	Other areas in Alberta	Saskatchewan	Manitoba	Total
Wells drilling	54	41	7	.....	102
Structure test wells	.....	103	2	3	.....
Footage drilled in wells	125,506	61,291	6,181	.....	192,978
Footage in structure tests	.....	38,270	570	577	39,417
Wells commenced	27	25	4	.....	56
Wells completed	19	11	.....	.....	30
Wells suspended (a)	5	17	5	.....	27
Wells abandoned	.....	11	1	.....	12
Wells encountering oil shows	16	4	3	.....	23
Wells encountering gas shows	15	13	3	.....	31
Wells encountering oil production	10	4	.....	.....	14
Wells encountering naphtha	13	.....	.....	.....	13
Wells encountering asphalt	.....	2	.....	.....	2
Wells encountering dry gas	.....	5	.....	.....	5
Wells now producing oil by pumping	6	3	.....	.....	9
Wells now producing oil by flowing	4	.....	.....	.....	4
Wells now producing naphtha and gas	20	.....	.....	.....	20

(a) Majority suspended on account of weather conditions.

NATURAL GAS PRODUCED AND USED IN ALBERTA IN 1928

Quantities in thousands of Cubic feet

Field	Produced	Used			Total
		Domestic	Commercial	Industrial	
Turner Valley	7,393,690				
Foremost	712,000				
Barnwell	5,000	3,361,766	776,000	4,053,924	8,191,690
Brooks	38,000				
Bow Island	43,000				
Viking	2,377,769	1,542,670	505,838	329,261	2,377,769
Wainwright	126,000	40,000	.....	86,000	126,000
Wetaskiwin	50,000	.....	.....	50,000	50,000
Bassano	2,000	.....	.....	2,000	2,000
Redcliff	860,000	70,000	.....	790,000	860,000
Medicine Hat	2,591,500	610,500	40,000	1,941,000	2,591,500
Totals	.....	5,624,936	1,321,838	7,252,185	14,198,959

Laboratory Operations

During the year, geological examinations of formation samples received from wells were carried on as usual. A total of 17,777 samples, equalling 174,720 feet of well drilling was examined. These samples were received from wells

drilled at widely separated points in Alberta and Saskatchewan and, as representative samples were bottled, these should be of great value for future reference. Since considerable core drilling has been done at many points, examinations at the wells were necessary. Sixteen visits were made to the various points.

An assistant chemist was appointed to the Calgary office, and since assuming his duties he has carried out 119 analyses, chiefly of water, coal, oil and gas.

The analyses of water proved of particular value as they enabled the engineering staff accurately to check sources of water when well water shut-offs were in doubt. Oil analysis was only possible for gravity and water content tests. The necessary additional equipment is being installed and when completed will permit of complete analyses of oils being undertaken. Under the "miscellaneous" heading, tests were principally made with the object of discovering the cause of the so-called "freezing up" of wells in the Turner valley. Valuable data on this subject, which, it is expected, will materially assist operators carrying out well drilling in the foothill areas, resulted from these experiments.

Coal Mining

Alberta

The markets for Alberta coal have been maintained and have resulted in increased output of the several classes of coals. During the calendar year 1928 the total production was 7,334,179 tons—the largest output ever reached in the province. Of the total, 1,409,475 tons were consumed in the province of Alberta; 2,422,729 tons in other provinces in Canada; 42,265 tons in the United States; 3,054,239 tons by railway companies; and 22,882 tons made into briquettes. The total number of mines operated during 1928 was 284, the number in operation at December 31, 1928, being 247.

As far as possible inspections have been carried out for the purpose of checking up the quantities of coal extracted from the various leases on Dominion and School lands. In cases where doubt existed as to the correctness of plans, underground surveys have been carried out in order to verify the position of the working faces. Special surveys have been made in three cases where operators had contravened Section 196 of the Railway Act under which mining companies are required to leave barrier pillars to protect the right of way. The staff of the Calgary office have, in all cases, co-operated with the engineers of the Board of Railway Commissioners, the railways, and the operators, and in two of these cases were able to bring about satisfactory adjustments. In the third case there was a conviction.

The department's engineers have also been called upon to assist prospectors in their efforts to discover merchantable coal seams in the coal-bearing formations in the Railway Belt in British Columbia. They have also co-operated with other branches in connection with the leasing of surface rights for mining operations.

Considerable assistance has been given and a number of valuations have been submitted to the Department of Justice in disposing of property and equipment seized for non-payment of royalty and rental. The Calgary office has also given help and advice to operators and lessees in the interpretation and requirements of the Coal Mining Regulations and matters arising thereunder, as well as making chemical analyses of coal samples and giving advice on coal purchases for the fuel requirements of other branches of the government service.

STEAM COAL MINES

Crowsnest Area.—A new mining development has been carried out by the Hillcrest Collieries Limited near Passburg, Alberta which will add to the

available tonnage in this area. An additional electrical unit has been added to the plant of the East Kootenay Power Company, Limited, at Sentinel, Alberta. This steam plant supplies power to the Crowsnest coal mines and other consumers in that district.

The West Canadian Collieries Limited have installed a wet coal cleaning plant at their Bellevue mine and contemplate the construction of an additional unit.

Canmore Area.—The production of briquettes by the Canmore Coal Company has been maintained and shows an increase over the preceding year.

Brazeau-Mountain Park Area.—Mines in this area have worked fairly regularly during the year. Additions and extensions have been made to the mining plants in keeping with the increased production.

The Blue Diamond Coal Company abandoned their operations at Brûlé and the mining machinery and equipment is in process of being dismantled and sold.

Railway location surveys to the area formerly known as the Drinnan Claims, located southeast of Brûlé lake, have been made with the intention of commencing development of that district.

DOMESTIC COAL MINES

Lethbridge-Taber Field.—The development started by the C. S. Donaldson Coal Company on the Kipp-Retlaw extension of the Canadian Pacific railway has been taken over by the Cadillac Coal Company, Limited, who have commenced the installation of a modern colliery plant for the extraction of the Lethbridge seam under that property.

The extension of the Calgary Power Company's system southerly to the above field has enabled the smaller operators to introduce electric mining machines and equipment in place of the more expensive steam engines used hitherto.

Drumheller-Carbon Area.—The completion of the branch railway from Rosedale southerly to Rosemary on the main line of the Canadian Pacific railway has brought the Murray Collieries, Atlas and Arcadia Companies into production. These companies have erected modern mining plants at their respective locations. Several small mines have also started development on both sides of the river now that railway transportation has been provided, and will be able to provide employment for some of the surplus labour available as the result of abandonment of some of the workings at Drumheller.

The Drumheller Land Company having disposed of their leases to the Drumheller Consolidated Collieries Limited, the latter company propose to develop their areas on the north side of the Red Deer river. New shafts have been sunk and a modern tipple constructed by the Midland Coal Company on the Canadian National Railway line between Drumheller and Munson and the company are now producing from their westerly leases as well as from their older workings in the east half of section 9, in township 27, range 20, west of the 4th meridian.

The New Castle Coal Company, Limited, have sunk a shaft at their plant site to the Lower or Drumheller seam which is now being developed. Diamond drilling has shown that at the Sterling mine, abandoned several years ago, the lower seam is present and shows a workable thickness of coal to exist under the southeast quarter of section 9.

Three Hills-Ardley Field.—The Carbondale Coal Company's mine at Ardley resumed their coal shipments during the fall of 1928.

The Ellis Coal Company, Limited, and the Pallisade Coal Mining Company continued their operations, but some of the smaller wagon mines in this area were closed.

Coalspur-Lovett Area.—Considerable alterations and improvements have been made at the Foothills Collieries Limited, resulting in increased production.

The prospecting by means of core drills in the vicinity of Bliss on the Canadian National Railway line in township 51, range 24, west of the 5th meridian, has resulted in the discovery of a workable seam on the northerly extension of the Coalspur coal series.

The Jasper Coal Company, Limited, have commenced operations for the development of part of this area. Other lessees contemplate further work in this locality.

Saskatchewan

During the year 35 mines were surveyed or their measurements extended. The work included four new or initial surveys. One hundred and seven regular mine inspections were made, and reported in due form. Besides regular inspections, many visits were made to mines for different causes. Only one case of illegal mining operations was reported in which four persons were involved, and investigation of this case was proceeding at the close of the fiscal year.

The output of coal for the whole province for the year ended December 31, 1928, was 467,131 tons, which was slightly less than in the preceding year but may be considered as average for the past five years. The decrease in production was attributed largely to the mild character of the winter. Several new coal-cutting machines were installed during the period.

Motor trucks are now almost exclusively used for hauling from the small mines, and this to some extent has increased the output from small mines, which has resulted in a corresponding decrease from the larger mines.

One fatal accident occurred during the year.

The old briquetting plant of the Lignite Utilization Board has been remodelled. A large number of men were engaged on this work during last summer and fall. At the end of the fiscal year the new plant was just starting operations but no commercial briquettes have yet been produced, although everything now seems to be ready for production.

The table which follows is divided into three classes showing output during the calendar year 1928 of coal from Dominion lands subject to royalty, coal subject to royalty taken from school lands, and coal produced not subject to royalty.

Province	Output subject to royalty		Not subject to royalty	Total
	Dominion lands	School lands		
	tons	tons	tons	tons
Alberta	4,710,288	153,576	2,470,315	7,334,179
Saskatchewan	112,565	3,942	350,624	467,131

The table hereunder shows the number of mines operating in Alberta and Saskatchewan, subject to royalty, and those not subject to royalty, also the total number operated during the calendar year 1928.

Province	Number of operating coal mines subject to royalty		Not subject to royalty	Total
	Dominion lands	School lands		
Alberta	181	16	87	284
Saskatchewan	61	4	10	75

SODIUM SULPHATE

Under the Quartz Mining Regulations the sodium sulphate deposits and operations at Frederick lake near Dunkirk, Saskatchewan, were inspected and reported on.

METAL MINING ON DOMINION LANDS

The past year has witnessed a noteworthy advance in the mining development of the Precambrian area of the three Prairie Provinces and the Northwest Territories. After some years of stagnation due largely to the difficulty of access and to the refractory nature of many of the ores encountered, there has been a great revival of interest in prospecting and mining activity in this area, caused in a large measure by the development of mining operations on a large scale in the more northerly parts of Manitoba and Saskatchewan. This interest has also been stimulated by the construction of the Flin Flon and Sherritt Gordon branch lines and the rapid completion of the Hudson Bay railway to Churchill on Hudson bay.

Many new discoveries were made during the year. Among the minerals found were gold, silver, copper, zinc, lead, tin, and nickel. Some of these were found as far south as the Winnipeg river in southeastern Manitoba and as far north as the Arctic ocean. From east to west these finds extended from Hudson bay to the Rocky mountains. The area included within these boundaries is over 1,000 miles square.

The rapid development of this area on such a huge scale, after years of quiescence except for a small amount of prospecting and intermittent production, necessarily brought with it the usual crop of administrative difficulties. The Quartz Mining Regulations were found to be inadequate to meet the needs of the rapidly advancing conditions of this promising mining field and the departmental machinery which had heretofore satisfactorily handled the administration of these regulations was found to be insufficient to meet the demands of the rapidly developing mining industry.

New Quartz Mining Regulations were passed by Order in Council on January 19, 1929, and made effective on April 1 following. Among the most radical changes were the following:—

(1) Adoption of the four post system of staking instead of two posts as formerly.
(2) Miners licences required to prospect or hold mineral rights.
(3) Provision for the staking of a maximum number of claims in each mining division: (*a*) 9 claims or 464·85 acres in the Prairie Provinces, (*b*) 18 claims or 929·70 acres in the Northwest Territories.
(4) Forty days assessment work required annually per claim for five years, instead of $100 worth of work each year for the same period.
(5) Fractions to be allotted or leased by the Minister to adjoining claims.
(6) Royalties on net profits only.
(7) Reduction of fees.
(8) Provision for a thorough system of inspection and supervision of all mining activity by qualified mining engineers of the Department of the Interior.

In order to provide the closest co-operation between the department and the industry an office was opened in the summer of 1928 at The Pas under the direction of the Supervisory Mining Engineer. Engineers from this office spent the season in the field and visited all of the most active areas. The close co-operation of these officers with those actively engaged in the industry in the field and the solution of many of the problems of the latter affected by administration have been conspicuous features of the department's work in the Middle West.

III

FORESTRY

REPORT OF THE DIRECTOR OF FORESTRY, E. H. FINLAYSON

Empire Forestry Conference

The outstanding event in forestry affairs during the year was the Third British Empire Forestry Conference held in Australia and New Zealand from August to October.

The Canadian delegation was headed by Mr. E. H. Finlayson, Director of Forestry, of the Department of the Interior. Other delegates were Mr. D. R. Cameron, Associate Director of Forestry; Dr. J. M. Swaine, Associate Dominion Entomologist, of the Department of Agriculture; Mr. E. J. Zavitz, Deputy Minister of Forests for the province of Ontario; and Mr. P. Z. Caverhill, Chief Forester of the province of British Columbia.

The conference reviewed the progress made in forestry in the various parts of the Empire during the five years which had elapsed since the second conference held in Canada in 1923, and discussed in detail forestry problems relating to the Empire in general and to Australia and New Zealand in particular. Meetings were held in the capital cities of the Australian states, with the concluding session at Canberra. In New Zealand, important sessions were held at Wellington and at Auckland, where the conference was wound up on October 22.

The most important feature of the conference, however, was the opportunity afforded for special inspection of forest conditions throughout Australia and New Zealand, for discussion of these conditions with local forest officers, and for comparison of them with conditions existing in all other parts of the British Empire. The importance of Canadian forest resources to the well-being of the British Empire was stressed, and attention was drawn to the necessity for the adoption in Canada, as in other parts of the Empire, of the main elements of proper forest policy.

The following excerpt from the report of the conference is of particular interest: "Emphasis was laid on the need for considering forestry in its national and imperial aspects, rather than as a simple matter of provincial or local concern. The view was advanced that central governments should take the lead in matters of policy—except where they are constitutionally precluded from so doing—laying down policy and taking control of legislation, general management, the alienation of reserved forest, the recruitment and training of superior staff, and research. Interference in petty detail was not contemplated."

General

The fire season of 1928 was in many respects unusual. Except in British Columbia, the snowfall during the preceding winter was extremely light and with the advent of spring came warm, dry weather, which resulted in an outbreak of fires throughout the Prairie Provinces. A second period of fire danger occurred, as might be expected, during the summer season, but this was followed by a third period during the fall, prolonged, indeed, well into the winter months. As a matter of fact, forest fires were fought in the northern parts of the provinces of Manitoba and Saskatchewan well into the New Year. That the loss to timber and property was kept within reasonable bounds was due largely to

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improved organization, better equipment, and increased facilities for detection, communication, and transportation. In particular, the use of aircraft was extended and improved to a marked degree.

Activities in forest research continued along normal lines both in the conduct of experiment stations and in co-operative undertakings with the provincial forest authorities and with several of the larger pulp and paper corporations. The Forest Products Laboratories at Ottawa became established in their new location, and a start was made on an extended program of work rendered possible by increased facilities and augmented staff. The year also saw the installation of the Pulp and Paper Division in the new quarters at Montreal provided by the Pulp and Paper Association.

Fires and Fire Protection

Manitoba.—In Manitoba the fire season of 1928 was one of the worst ever experienced. The snowfall during the preceding winter had been light, and warm, dry weather came on in the spring, with the result that the ground dried out rapidly and risk of fire ensued. In the south of the province a high fire-hazard existed from early spring until approximately the end of May. In northern Manitoba these conditions started somewhat later, but continued until the end of August. Another season of fire danger occurred in September and October, although in this case it was not so serious. The danger of fires ceased about the middle of November. Of the fires that occurred in May, 34·4 per cent were due to settlers and 17·5 per cent to incendiaries. In 1,660 hours of flying the aerial patrol detected 179 fires; of this time 34 hours were flown during winter and early spring with aeroplanes equipped with skis. No smouldering ground fires were discovered during the late winter of 1928.

Saskatchewan.—In Saskatchewan the fire season was the longest for ten years; the fire-hazard covered practically the entire season. The area of timberland destroyed, however, was comparatively small and the loss of merchantable timber was extremely slight. The weather in September and October was very mild and prolonged the hazard conditions, which were, however, relieved by a light snowfall in December. The aircraft operations for fire protection proved very successful. A new feature of the situation was the numerous ground fires in the woods during the hunting season (commencing November 15), fifteen or twenty fires having been reported in late November and early December. The total area burned within the national forests was 22,733 acres—less than half of one per cent of the total area of these forests. Losses from fires within the national forests in 1928 are about half the average for the preceding five years; the fire loss on the national forests did not exceed $16,000.

In the last quarter of the fiscal year (January to March inclusive, 1929) thirty-one fires were reported. These resulted principally from winter logging operations and work on winter freight roads, having been set by loggers, hunters, trappers, and fishermen. They were spreading in the ground under the snow, and all required trenching. Nearly all the fire-ranging staff went on duty early in March, 1929.

Air operations for the 1929 season commenced on March 15. The rangers were transported to their districts, and supplies and equipment sent to the northern posts. Wireless stations at Ladder Lake and Ile à la Crosse reopened during March, and that at Pelican Lake was expected to open early in April. Five wireless stations are now in operation.

Alberta.—In Alberta there were three periods of fire-hazard. The first of these comprised the latter half of May in the Lesser Slave district and Edmonton fire-ranging district, and on to June 5 in the forests of the eastern slope of the Rockies; much of the danger arose from the dried vegetation of the previous year. The second period lasted from the middle of July to the middle of August, and the third began in the first week of September and lasted until the end of November.

During the third period a great quantity of dry vegetable material had accumulated, owing to the prolonged dry weather and the early frosts; many new settlers were using fire for clearing land, and an early harvest and excellent roads gave unusual opportunities for farmers and others to go hunting. All these circumstances combined gave rise to an unusually severe fire-hazard. In the air patrol 241 hours flying was done from the High River base, and 181 hours from the sub-base at Grande Prairie, the total time spent in flying thus amounting to 422 hours.

British Columbia.—The fire season in British Columbia was exceptionally favourable, and the damage done by fire and the cost of fire-fighting were among the lowest on record. During the winter of 1927-8 there was an unusually heavy snowfall. In April there was a small hazard and the month of May was very dry; again in the latter part of July and throughout the month of August there was a severe hazard. The damage from railway fires was very small, though over twenty per cent of the fires originated from the operation of railways. Lightning was another of the chief causes.

The following tables give the figures for the forest fires of the season of 1928-9:—

STATEMENTS—Forest Fires on Dominion Lands under the Protection of the Forest Service, Department of the Interior, during the year ended March 31, 1929

Table 1

NUMBER OF FIRES WITHIN NATIONAL FORESTS, AREA BURNED AND FIRE LOSS BY CAUSES

Causes	Manitoba			Saskatchewan			Alberta			British Columbia			Totals		
	No.	Area	Damage	No.	Area	Damage	No.	Area	Damage	No.	Area	Damage	No.	Area	Damage
		acres	$		acres	$		acres	$		acres	$		acres	$
Camp-fires	5	1,082	222	28	3,383	2,441	6	4	17	9	1,776	1,809	48	6,245	4,489
Smokers	5	58	10	7	483	966	6	759	713	17	4,776	9,132	35	6,076	10,821
Settlers	3	720	.....	12	11,160	8,696	1	100	67	....	.....	.....	16	11,980	8,763
Railways	....	.....	.....	12	2,142	2,995	7	50	28	10	95	2,470	29	2,287	5,493
Lighting	....	.....	.....	1	500	377	....	.....	.....	7	72	360	8	572	737
Industrial operations	....	.....	.....	10	3	50	2	9	8	....	.....	.....	12	12	58
Incendiary	18	19,578	17,546	8	1,933	389	1	.....	.....	15	5,791	5,041	42	27,302	22,976
Public Works	1	.....	.....	....	.....	.....	....	.....	.....	....	.....	.....	1	.....	.....
Unclassified	....	.....	40	2	6	.....	2	.....	.....	3	20	15	7	26	55
Unknown	8	2,106	548	4	1,115	35	3	2,587	4,700	....	.....	.....	15	5,808	5,283
Totals	40	23,544	18,366	84	20,725	15,949	28	3,509	5,533	61	12,530	18,827	213	60,308	58,675
Total costs of suppression	....	.....	4,691	....	.....	3,898	....	.....	872	....	.....	13,859	....	.....	23,320
Total fire losses	....	.....	23,057	....	.....	19,847	....	.....	6,405	....	.....	32,686	....	.....	81,995

Table 2

NUMBER OF FIRES OUTSIDE NATIONAL FORESTS, AREA BURNED AND FIRE LOSS BY CAUSES

Causes	Manitoba			Saskatchewan			Alberta			British Columbia			Totals		
	No.	Area	Damage	No.	Area	Damage	No.	Area	Damage	No.	Area	Damage	No.	Area	Damage
		acres	$		acres	$		acres	$		acres	$		acres	$
Camp-fires	157	182,748	63,695	84	41,641	59,602	51	48,588	26,104	23	14	4	315	272,991	149,405
Smokers	16	1,723	1,026	14	19,687	8,875	16	6,596	8,915	41	425	136	87	28,431	18,952
Settlers	65	31,088	5,989	73	174,870	90,214	66	106,690	66,020	20	376	1,885	224	313,024	164,108
Railways	39	95,559	32,050	8	2,086	4,635	201	13,588	5,569	223	1,262	9,939	471	112,495	52,193
Lightning	34	71,045	50,999	12	138,508	132,388	....	.....	.....	56	322	1,336	102	209,875	184,723
Industrial operations	....	.....	.....	9	31	15,520	4	3,760	3,439	5	1,277	3,859	18	5,068	22,818
Incendiary	12	3,737	2,855	25	43,518	26,482	5	19,061	17,187	18	300	4,385	60	66,616	50,909
Public works	....	.....	.....	2	390	57	....	.....	.....	2	.....	.....	4	390	57
Unclassified	4	4,637	10,931	2	26	31	12	2,854	413	17	406	2,190	35	7,923	13,565
Unknown	13	6,302	2,932	7	25,662	15,210	13	16,068	30,486	9	563	4,725	42	48,595	53,353
Totals	340	396,839	170,477	236	446,419	353,014	368	217,205	158,133	414	4,945	28,459	1358	1,065,408	710,083
Total costs of suppression	....	.....	19,905	....	.....	27,842	....	.....	15,377	....	.....	12,749	....	.....	75,873
Total fire losses	....	.....	190,338	....	.....	380,856	....	.....	173,510	....	.....	41,208	....	.....	785,912

Table 3

TOTAL NUMBER OF FIRES WITHIN AND OUTSIDE NATIONAL FORESTS, AREA BURNED OVER AND FIRE LOSS BY CAUSES

Causes	Manitoba			Saskatchewan			Alberta			British Columbia			Totals		
	No.	Area	Damage	No.	Area	Damage	No.	Area	Damage	No.	Area	Damage	No.	Area	Damage
		acres	$		acres	$		acres	$		acres	$		acres	$
Camp-fires	162	183,830	63,917	112	45,024	62,043	57	48,592	26,121	32	1,790	1,813	363	279,236	153,894
Smokers	21	1,781	1,036	21	20,170	9,841	22	7,355	9,628	58	5,201	9,268	122	34,507	29,773
Settlers	68	31,808	5,989	85	186,030	98,910	67	106,790	66,087	20	376	1,885	240	325,004	172,871
Railways	39	95,559	32,050	20	4,228	7,630	208	13,638	5,597	233	1,357	12,409	500	114,782	57,686
Lightning	34	71,045	50,999	13	139,008	132,765	....	.....	.....	63	394	1,696	110	210,447	185,460
Industrial operations	....	.....	.....	19	34	15,570	6	3,769	3,447	5	1,277	3,859	30	5,080	22,876
Incendiary	30	23,315	20,401	33	45,451	26,871	6	19,061	17,187	33	6,091	9,426	102	93,918	73,885
Public works	1	.....	.....	2	390	57	....	.....	.....	2	.....	.....	5	390	57
Unclassified	4	4,637	10,971	4	32	31	14	2,854	413	20	426	2,205	42	7,949	13,620
Unknown	21	8,408	3,480	11	26,777	15,245	16	18,655	35,186	9	563	4,725	57	54,403	58,636
Totals	380	420,383	188,843	320	467,144	368,963	396	220,714	163,666	475	17,475	47,286	1,571	1,125,716	768,758
Total costs of suppression	....	.....	54,596	....	.....	31,740	....	.....	16,249	....	.....	26,608	....	.....	99,193
Total fire losses	....	.....	213,395	....	.....	400,703	....	.....	179,915	....	.....	73,894	....	.....	867,951

Table 4

CLASSIFICATION BY SIZE OF FIRE

Province	Class A (Under ¼ acre)		Class B (¼ acre and over, but under 10 acres)		Class C (10 acres and over)		Totals, 1928-29		Totals, 1927-28		Totals, 1926-27	
	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	Total No. of fires	Per cent Class "A"	Total No. of fires	Per cent Class "A"
Manitoba	66	17	93	24	221	59	380	100	110	36	463	33
Saskatchewan	50	16	75	23	195	61	320	100	109	11	221	10
Alberta	56	14	148	38	192	48	396	100	211	56	268	40
British Columbia	305	65	105	22	65	13	475	100	231	51	446	25
Totals	477	30	421	27	673	43	1,571	100	661	43	1,398	28

Table 5

DISTRIBUTION BY MONTHS

Month	Manitoba		Saskatchewan		Alberta		British Columbia		Totals	
	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent
April, 1928	15	4·0	22	6·9	14	3·6	10	2·3	61	3·9
May	154	40·5	148	46·2	187	47·2	101	21·3	590	37·6
June	34	9·0	5	1·5	10	2·5	41	8·7	90	5·7
July	66	17·4	9	2·9	12	3·0	109	22·8	196	12·5
August	29	7·6	17	5·3	9	2·3	105	22·1	160	10·2
September	28	7·4	44	13·8	58	14·6	84	17·6	214	13·6
October	18	4·7	20	6·3	35	8·8	22	4·6	95	6·0
November	2	0·5	24	7·5	68	17·2	3	0·6	97	6·2
December	6	1·6	18	5·6	3	0·8	.....	.....	27	1·7
January, 1929	10	2·6	4	1·2	.....	.....	.....	.....	14	0·9
February	10	2·6	1	0·3	.....	.....	.....	.....	11	0·7
March	8	2·1	8	2·5	.....	.....	.....	.....	16	1·0
Totals	380	100·0	320	100·0	396	100·0	475	100·0	1,571	100·0

Table 6

STATEMENT OF THE AMOUNT OF TIMBER AND OTHER PROPERTY DESTROYED

Province	Salvable timber			Unsalvable timber			Damage to timber		Damage to young growth		Damage to other property		Total damage
	Saw-timber	Other	Depreciation	Saw-timber	Other timber	Damage							
	Ft. b.m.	Cords	$	Ft. b.m.	Cords	$	$	%	$	%	$	%	$
Manitoba	534,000	9,696	40	2,986,530	144,426	94,456	94,496	50·77	89,855	46·88	4,492	2·35	188,843
Saskatchewan	81,320	45,024	5,711	9,075,400	316,453	111,881	117,592	32·26	231,596	62·45	19,775	5·29	368,963
Alberta	3,919,845	12,125	7,019	14,663,500	56,186	59,990	67,009	40·94	91,096	55·67	5,561	3·39	163,666
Br. Columbia (Dom Lands)	4,928	114	4,179	11,051	9,509	15,235	19,414	41·05	1,759	3·72	26,113	55·23	47,286
Totals	4,540,093	66,959	16,949	26,736,481	526,574	281,562	298,511	38·91	414,306	53·81	55,941	7·28	768,758

Table 7

STATEMENT OF DOMINION LANDS BURNED OVER, SHOWING OWNERSHIP AND FOREST CONDITIONS

Province	Total area burned over	Ownership				Forest conditions							
		Public		Private		Merch. timber		Partially cut-over		Young growth		Not forested	
	acres	acres	%	acres	%	acres	%	acres	%	acres	%	acres	%
Manitoba	420,383	410,898	97·75	9,485	2·25	33,782	8·03	2,413	0·58	112,250	26·70	271,938	64·69
Saskatchewan	467,144	356,281	76·27	110,863	23·73	112,152	24·01	10,820	2·32	148,619	31·81	195,553	41·86
Alberta	220,714	219,501	99·45	1,213	0·55	22,064	10·00	10,517	4·76	48,641	22·04	139,492	63·20
Br. Columbia	17,475	16,515	95·75	960	4·25	8,620	51·26	2,158	12·33	1,825	10·47	4,872	25·94
Totals	1,125,716	1,003,195	89·13	122,521	10·87	176,618	15·70	25,908	2·29	311,335	27·67	611,855	54·34

Improvements

The following is a list of the principal improvements made during the year:—

	Number
Ranger houses	7
Ranger cabins	18
Warehouse	1
Garages	5
Stables	10
Barns	5
Machine sheds	10
Lookout cabins	15
Lookout towers	8
Bridges	8
Other buildings	11

	Miles
Telephone lines	269
Roads	173
Trails	665
Fireguards (ploughed)	243
Fireguards (cleared)	107½

Grazing

The objective underlying the regulations for grazing on the national forests is to obtain the maximum use of forage existing on forest ranges. This is not only for the economic benefit to the country of such use, but also because the fire hazard is reduced thereby.

Considerable progress is to be reported in regard to grazing in British Columbia; Saskatchewan shows a marked decline; in the other provinces the situation remains much the same. In British Columbia the grazing regulations were adopted generally in the season of 1928 for the first time, and were willingly accepted by stockmen; several trails were made and a number of sorting corrals were built to facilitate the use of alpine ranges for sheep, and a round-up of "wild" horses was made.

Forest Management

The management of national forests, along scientific lines, for maximum reproduction and improved growing conditions is receiving the closest attention.

Small but more or less stable local industries, based on the demand for railway ties, poles, fuel, and other products manufactured by hand are becoming regular activities of many communities, affording opportunity for the investment of small capital, and offering employment at seasons when work in other pursuits is frequently at a minimum.

In Manitoba the cut of sawlogs was only about half that of the preceding year, but the cut of ties was slightly increased. Six new timber sales were awarded, and a larger number of timber permits than in 1927 was granted. The total cut under permit was, however, somewhat smaller.

Thirty new timber sales were made in Saskatchewan, making 47 sales in active operation.

In Alberta 19 new sales were awarded making a total of 31 active during the year. The lumber cut was 50 per cent greater, and the mining timber doubled that of the previous year. Timber cut under permit also showed a considerable increase.

In the British Columbia Inspectorate there was a year of unusual activity in timber sales. The products taken out were largely standard telephone poles and fence posts and railway ties of various species of wood.

In all districts the regulations respecting timber disposal were, in general, satisfactorily complied with.

Seeding and Planting

In Manitoba experiments in seeding were continued in the Sandilands national forest, where a total of 100 sample plots is now under observation. In the Riding Mountain national forest five acres of clear-cut poplar were broadcast-burned and sown to white spruce. In each national forest a nursery is now maintained with, in most cases, a watering system. The totals of the different kinds of stock on hand at national forest nurseries were as follows at the close of the fiscal year: one-year seedlings, 958,000; two-year seedlings, 340,000; three-year seedlings, 73,000; two-year seedlings one-year transplants, 349,000; two-year seedling two-year transplants, 39,000.

In Alberta about fifty-eight acres in the Cooking Lake national forest were planted to white spruce on a fifty-year-old burn; this makes a total area planted in this forest during the past ten years of 225 acres. The growth was satisfactory, but considerable rabbit damage was experienced. Three hundred and forty acres were "seed-spotted" in 1924-5, but the results were not uni-

formly successful, and this experiment has been discontinued until the results are apparent. In the Crowsnest forest six acres were successfully sown broadcast on a recent burn, and this experiment is to be enlarged.

Recreational Uses of National Forests

Manitoba reports increased patronage of the summer resorts in the national forests, in which numerous improvements have been made. The number of visitors to the resorts during the summer of 1928 was about 11,300.

In Saskatchewan there are three established summer resorts. The largest of these (Fish Lake, in the Moose Mountain national forest) is frequented not only by Canadians, but by many United States residents as well; many of the latter, indeed, have built expensive permanent summer cottages in the resort. The number of persons spending the week-end at this resort reaches as high as eight hundred. A tendency exists to form community recreational clubs to concentrate effort on making a recreational centre for the community; in the one case a municipality located near one of the national forests has made an exchange with this service of a parcel of non-agricultural land in return for equivalent lands within the national forests, with the object of establishing a community resort.

In Alberta the only summer resort on a national forest (Elkwater Lake, in the Cypress Mills) was well patronized, the number of visitors being 4,000, but other localities in the national forests were visited by large numbers of tourists. In British Columbia the national forests are being used more than ever for recreational purposes. Camping and picnicking facilities have been provided at a number of points. There is a tendency to get away from the formal resorts and visit the less frequented districts.

Surveys

A stock-taking survey was made in the Pasquia national forest by two five-man crews. The forest flora was also studied, in order to test the applicability of Cajander's theory of forest types to the forests of this region. The strip system was used, and 44½ square miles were covered. The final report of the survey of the Lost River block of the Fort à la Corne forest was completed. An extensive stocktaking survey was made in the Fort à la Corne forest, 21 square miles being covered in 28½ days.

In Manitoba four seven-man parties were in the field, three in the Nelson River area, and one in the Saskatchewan basin. A large area was covered, of which timber-type maps were prepared from aerial photographs by the Topographical Survey of the Department of the Interior; these maps were checked by forest officers in flights over the area. Two parties were engaged on winter surveys; one seven-man party continued the survey work in the Lake Winnipegosis area, and a ten-man party examined a number of townships in southeastern Manitoba. The total area examined by these parties was 4,647 square miles.

Seed Collection and Extraction

In Manitoba the collection of Manitoba maple and red (Norway) pine seed was carried on. The maple seed was collected in the Dauphin district; of the red-pine seed 75 pounds were collected at Woodridge and Vassar, in southeastern Manitoba, and a small amount at Black island in lake Winnipeg, this latter place being at the extreme northern limit of the range of this species.

In Alberta 500 bushels of lodgepole pine cones were collected—200 bushels from the Cypress hills, the rest from the Clearwater forest.

A poor seed-year was experienced in British Columbia. The quantities of seed collected in that province were as follows: Western yellow pine, 803

pounds; Douglas fir, 63¼ pounds; Sitka spruce, 890 pounds; Western cedar, 211 pounds; Western white pine, 2 pounds; Western hemlock, 40½ pounds; cascara, 10 pounds; grand fir, 7 pounds; Western larch, 24 pounds; lodgepole pine, 73 pounds; amabilis fir, 15 pounds.

In Saskatchewan the 1928 crop of white spruce seed was a complete failure. At Prince Albert 248 pounds of jack-pine seed were extracted. The average cost of collection and extraction was $3.05 per pound, a saving of $1.35 per pound as compared with the cost of seed in 1927.

The motive underlying the enlargement of this work in recent years is the desire of the Canadian Government to assist the Imperial Forestry Commission to reforest certain areas in the British Isles denuded during the war years. Experience has shown that many Canadian trees, particularly the Douglas fir and Sitka spruce of the British Columbia coast, do well in Great Britain.

The work of seed collecting from a small beginning in 1917 has grown to large proportions and to-day is assisting in building up forests in many parts of the British Empire. New Zealand, in particular, is supplied each year with large quantities of Canadian tree seed, and smaller quantities are shipped to various parts of Australia and elsewhere.

Tree Planting on Prairie Farms

The season of 1928-9 had several unusual features—an exceptionally wet autumn in 1928, unusually light snowfall in the winter, unexpectedly mild weather in February and March, very cold weather in the latter part of April, and a hot, dry period subsequent to the first week in May. All over the Prairie Provinces there was much winter-killing of ornamental shrubs (even lilacs) and fruit trees, but practically no injury was done to the shelter-belt species of trees.

Excessive rainfall in June and early July caused considerable damage to shelter-belts in southeastern Manitoba, and many plantations were very weedy as a result of the wet weather. In most parts of the Prairie Provinces, however, plantations were successful with the exception of poplar and willow cuttings. The weather in the autumn was particularly favourable for nursery work.

The inspection lists included 13,305 names, an increase of 777 over 1927; of these 3,254 were entirely new applicants. Nine inspectors of tree plantations were employed. Little damage was noticed among the plantations; there was no winter-killing, no insect damage of any importance, slight damage by rabbits, and some damage through hail-storms. Tent caterpillars were troublesome on native poplars. The poplar and willow aphis, the spruce sawfly, and the red spider did a certain amount of damage. There was a noticeable improvement among the school plantations in Saskatchewan. The older farm plantations are keeping up well, but the force of inspectors is not large enough to investigate these with any degree of thoroughness. The planting of field shelters is increasing, and some significant results have been noted.

The distribution comprised 7,000,300 broad-leaved seedlings and cuttings and 101,500 conifers. The broad-leaved cuttings were sent to 5,539 applicants, the conifers to 1,026. The quality of the 7,745,625 broad-leaved seedlings and cuttings available for distribution from the nursery in 1929, is better than usual. There are also 101,800 evergreen transplants available, and those now coming on in the nursery are of unusually good quality. The benefit of the watering system installed on the nursery in the case of conifers has been very marked. Experimental work with exotic species is also being carried on.

Pending the measurement and plotting of the permanent plantations, little thinning has been done. Caragana used as a filler has been found to affect adversely the growth of spruce. Growth measurements have been started in the permanent plantations of the Sutherland nursery.

The popularity of both nursery stations among visitors continues. On some days from 700 to 1,000 people inspect the stations. Exhibits at fairs, public addresses, and articles for the press are also used as means of publicity.

A technical officer was transferred to the station during the past season for the study of plant diseases, but, as he did not report for duty until late in the season, little but preliminary work was accomplished. A study of the poplar canker has been begun; this disease has been very troublesome among poplars in plantations all over the Prairie Provinces. The conduct of this work marks the inauguration of a new general policy which aims at converting the nursery stations at Indian Head and Sutherland, Saskatchewan, into general forest experiment stations for the study of forestry conditions in the Prairie Provinces.

At the end of the year arrangements were also under way for the transfer to Indian Head of a highly trained technical silviculturist to further strengthen the staff at this station.

Tests in the preservation of fence-posts were continued, 170 aspen posts being added to those already under observation.

There is much opportunity for technical research in various lines on the nurseries, which it is hoped to undertake at an early date.

The development of shelter-belts under the tree distribution system has made a wonderful change in the way of general farm horticulture. In the shelter of these tree-belts the farmer finds he can now grow exceptionally fine vegetables, small fruits, and even tree fruits, and also flowers, herbaceous perennials, and ornamental shrubs to perfection. In the earlier days of settlement—and, in fact, until quite recently—few farmers grew their own vegetables, except, perhaps, potatoes. The shelter-belt is changing this. Last year's reports show that among 7,600 farms inspected where trees had been planted 6,800 had good vegetable gardens, 2,700 were growing small fruits, and 400 various tree-fuits. This is one line of endeavour which tends more to the building up of permanent farm homes than almost any other factor and is only possible after a reasonable amount of tree-planting has been done.

Forest Products Laboratories

Following a period of unsettlement during the removal of the Montreal Laboratory to Ottawa, and the transfer of the Pulp and Paper Division to the new building in Montreal, the past year has seen reorganization completed, and constructive work on various projects furthered.

The laboratories at Ottawa are now organized under four divisions, namely, (1) Timber Mechanics, (2) Wood Preservation, (3) Timber Physics, and (4) Timber Pathology. In addition to the equipment intended for the immediate use of these divisions the laboratory buildings also include the library, an exhibit room, draughting room, photographic dark-room, lecture hall, wood-working shop, sawmill, air-drying shed, experimental dry-kiln, and other accessory features.

A noteworthy feature of the work of the laboratories is the steady increase in the number of inquiries received in technical matters. Some of these have been of great industrial importance, and have resulted in the establishment of new projects for research.

Wood-Preservation Division.—The chief projects now occupying the attention of this division are the following: Protection of timber from marine borers (in co-operation with the federal Department of Public Works); resistance to change in moisture content of yellow birch ties treated with 70-30 creosote-coaltar mixture (*a*) with initial air-pressure, (*b*) without initial air-pressure; the distribution and penetration of creosote in jack pine ties treated with 70-30 creosote-coaltar mixture (*a*) with initial air-pressure, (*b*) without initial air-

pressure; the investigation of shale oil as a wood preservative; the separation of the foam encountered in the process of "boiling under vacuum" into its liquid and vapour constituents; the determination of the toxicity of wood preservatives; the observation of test tracks in which creosoted jack pine and hemlock ties and jack pine ties infected with red stain and red rot have been laid; the testing of creosoted Douglas fir timber. An apparatus has been devised and patented for the separation of the foam above mentioned into its liquid and vapour constituents, and a method has been developed for carrying out toxicity experiments on wood itself that has been previously impregnated with varying percentages of the preservative under test.

Timber Mechanics Division.—A large 200,000-pound timber-testing machine, with a weighing platform of 25 feet in length and a clear head of 16 feet, was installed early in the year. Projects now under way in this division include the testing of small clear specimens of Canadian woods, tests of the nail-holding power of Canadian woods, investigation of the design of wooden containers, research into the relation between the mechanical and physical properties of white spruce, tests of the mechanical properties of various Eastern species of timber (both treated and untreated) which may replace cedar for telephone poles, and the testing of the strength of treated and untreated Douglas fir beams. A certain amount of miscellaneous work is done for other Government services and for manufacturers in the testing of various timber products.

Timber Pathology Division.—Tests of jack pine infected with red stain and subsequently creosoted show that the organism causing the stain persists after the treatment, and that some modification of present methods of creosoting must be made in order to effect sterilization of the tie. Other studies being carried on include the investigation of moisture content as a factor in timber decay, and a study of blue stain in white pine, with special reference to methods of prevention or control. The reference collection of pathological material numbered 690 specimens at the close of the fiscal year, an increase of 139 during the year. Inquiries from timber users in regard to wood decay largely increased.

Timber Physics Division.—A study of the relation between the rate of growth and density of white spruce has been made, and the results are being incorporated in a bulletin to be issued shortly. Another problem of great importance has been the investigation of the absorption of water by floating logs, undertaken with a view to preventing the loss of logs through sinking while being "driven" to the mill; in connection with this project a special tank has been installed at the Ottawa laboratory to accommodate four-foot logs for purposes of observation. A number of investigations of lumber seasoning were carried out in response to requests from the wood-working industries, and plans have been drawn up for a special kiln to be used in this type of investigation. Many requests have been received for wood identification, and a bulletin on the subject is in preparation.

PULP AND PAPER DIVISION—MONTREAL LABORATORY

During the first part of the year (April to September) the work of the Pulp and Paper Division was subject to constant interruption during the process of dismantling the old quarters and removal to the new building. The staff was reduced to a minimum, only five men being employed in active research work. Three projects were carried on throughout the year, namely, (1) chemistry of wood, (2) pulp testing (physical and chemical), and (3) sulphite studies. A fourth project, "formation studies," was begun towards the latter part of the year, together with two distinct development studies

Chemistry of Wood.—A revision of the literature on lignin is now nearly completed. The work on the determination of lignin by the use of hypochlorous acid has proved of much importance. Other studies have been the isolation of lignin by means of formaldehyde and sulphuric acid, the possibilities of formaldehyde as a catalyst in sulphite cooking, the nature of cellulose and alpha-cellulose, the action of caustic soda on cellulose, the application of concentrated alkali solutions to commercial pulping operations, and the possibility of lignin by-product recovery.

Pulp Testing.—The adoption in other countries of the use of the standard freeness apparatus developed at this laboratory continues, and is now being considered by the British and Scandinavian industries. The work on testing for strength is being greatly furthered by the facilities afforded by the new laboratory. The work in chemical testing covered the development of new procedure for the cellulose, alpha-cellulose, and lignin tests, with study of the existing tests for copper number and baryta resistance.

Sulphite Studies.—This work was confined to the completion of the investigation into the physico-chemical characteristics of sulphur-dioxide solutions.

Formation Studies.—These studies have for their object the determination and study of the principles underlying the formation of a sheet of paper. They comprise (1) the character of the fibres, (2) the character of the stock suspension, (3) conditions during felting, (4) compacting of the sheet, (5) drying of the sheet, and (6) finishing and surfacing. Work up to the present has been confined to the first of these.

VANCOUVER LABORATORY

The scope of work of the Vancouver laboratory has been considerably broadened during the past year through the addition of new equipment, the initiation of several new projects, and closer contact with the timber industry.

Timber Testing Division.—The Vancouver laboratory is co-operating with the Ottawa laboratory in the testing of treated Douglas fir by testing the treated ties, while the Ottawa laboratory tests the larger timbers. Tests on green Western white pine were completed, tests of air-dried material well advanced, and all records brought up to date. Other projects under way are the study of the effect of variable moisture content on the strength of wood, an investigation of the deterioration of black cottonwood logs in fresh-water storage, and the retention of nails and screws by wood. Many miscellaneous studies were completed; a number of these were based on the utilization of waste; a study of the shear strength of glues has proved of considerable value to the Dominion Fisheries Branch, and tests made on a lot of timber cut to special order, acceptance of which had been refused, resulted in the order being passed with a saving of several thousands of dollars to interested parties and of several hundred thousand feet of valuable timber to the province.

Timber Products Division.—By means of the experimental dry-kiln, work has been carried on in drawing up drying schedules and temperature and humidity control in the seasoning of various species, the piling of random-width lumber, various methods of piling lumber and shingles, and in the study of equilibrium moisture content for the range of temperature and humidity used in kiln-drying lumber; many of these studies related specially to problems that had arisen in the work of various mills. The third six-day course in kiln-drying was held, with seventeen kiln operators and students in attendance. Degrade tests of lumber were made at three mills during the year, from which it appeared that marked improvement had been made in kiln-drying practice as the result of the studies of the same subject made in 1925. Assistance was given to many mills looking to the improvement of their drying practice.

Studies were also made of the cause of loosened grain and of the relative efficiency of air-drying and kiln-drying 2-inch Douglas fir stock. Studies in the absorption of moisture by kiln-dried stock showed that the kiln-dried stock absorbs considerable quantities of moisture when piled in open sheds, particularly if the method of piling be faulty, and so gives unsatisfactory results when put into use. Studies in the absorption of moisture by kiln-dried timber in transit, both by water and by rail, are also being carried on. A survey of mill waste is being carried on with the object of devising methods of utilizing much high-grade material now sent to the burners. Studies are also being made, in co-operation with the British Forest Products Laboratory at Princes Risborough, England, of the development of stain and decay in a cargo of Sitka spruce shipped in the hold of a steamship.

Many requests for technical information were answered during the year. Exhibits were prepared in co-operation with various organizations for the provincial exhibition at New Westminster, the Vancouver Publicity Bureau, the Convention of Western Retail Lumber Dealers at Vancouver, and the National Museum at Ottawa, and collections of material sent to the Australian forest school at Canberra and the forest experiment station at Tokyo, Japan.

Silvicultural Research

The Silvicultural Research Division in the summer season of 1928 had five parties in the field, four of them full strength and one of partial strength.

At the Petawawa forest experiment station a double party was maintained, one devoting its efforts entirely to research and the other to protection and the necessary improvements. Many remeasurements of sample plots were made and new plots established, on the areas cut over in 1921 for poplar match stock, to study the effect upon the reproduction of conifers. Plots were also located in the area cut over for jack pine in 1925 to study the effect of this release cutting on the understory of white and red pine. A number of plots were also established in the poplar-birch type for the study of the release of the understory of conifers. These plots were later thinned during the winter months.

The Quebec party confined its operations to the Lake Edward station. The permanent sample plots established in former years were remeasured and reorganized. With the findings from the line-plot survey conducted in 1925 and 1927 as a guide, six permanent sample plots were located in representative areas. The growth on these plots as obtained from periodic remeasurements will indicate the rate of growth for the types in the district.

In New Brunswick the research party established a series of plots on the experimental cuttings and areas girdled in 1927 at Salmon River. In the same district a line-plot survey was made to investigate the effect of logging operations on reproduction and rate of growth.

The Ontario party was located on the Goulais River watershed near Searchmont, where the line-plot survey begun in 1926 was completed. Four permanent sample plots located in average stands determined from the line-plot survey were established.

This year witnessed the beginning of forest research in the province of Nova Scotia. In co-operation with the provincial forest service a program of thinning farmers' woodlots was initiated, ten permanent sample plots being established in the white pine, red pine, balsam fir, and poplar types.

Research work on the forest reserves in western Canada is carried on under the supervision of the respective district offices, with the Research Division at head office acting in an advisory capacity.

Type Classification.—An investigation of the application of the Finnish system of classifying forest types elaborated by Dr. Cajander, in which plant

indicators are used in classifying forest soils, was undertaken in Alberta. While the first summer's work can only be considered as the initial period of this investigation, inasmuch as the work of botanizing and organizing the work had first to be undertaken, it was found that in certain cases good correlation existed between the yields and the flora of the forest. If the underlying principle can be adopted, even for forest zones in Canada, much of the labour of soil classification and type-mapping on surveys and in compilation of yield tables will be greatly simplified. The results already obtained warrant further and fuller investigation by competent men.

Planting and Seeding.—In Manitoba six plots of one-quarter acre each were seeded on the Sandilands national forest by the spot and broadcast methods. These complete a series of experimental sowings commenced in 1925, of 100 plots of one-quarter acre each. A report on the results of direct seeding in this district will be prepared as soon as results can be obtained.

On the Riding Mountain national forest five acres of land which had been clear-cut for poplar fuel-wood were broadcast-burned and sown with white spruce. This is part of a series of experiments on the study of type conversion.

In Alberta, on the Cooking Lake national forest fifty-eight acres of an area denuded by fire fifty years ago were planted with white spruce. The 340 acres seeded by the seed-spot method showed by a preliminary examination that this method was not uniformly successful. Present results seem to indicate that success may be obtained by this method on the moister sites. Broadcast seeding, on the other hand, as tested on an area of six acres of the Crowsnest national forest which had been denuded by fire, showed such success that a large area will be thus treated next year.

In British Columbia the planted and seeded plots already established were examined and data recorded. In addition, all yield and permanent sample plots were examined, remeasured, and thinned where necessary.

In Saskatchewan several detailed investigations of the factors controlling the success of nursery work were undertaken, and several reports made on which future work in forest nurseries in this district will be based.

Mensuration.—The compilation of form-class volume tables for eastern coniferous species and for certain western species has been completed. These tables will form the bulk of the publication of volume tables to be issued shortly in printed form. The final compilation of the study of the solid contents of piled cords of pulpwood has been completed and valuable tables of conversion factors derived. These will be published in the volume-table publication.

Publicity

The year opened with the usual activities incident to the annual Canadian Forest Week. The newspaper-advertising campaign was again entrusted to a commercial advertising agency. As a special feature, an interchange of speakers was arranged with the United States authorities, who were administering United States Forest Week during the same period (April 22 to 28, inclusive). The following prominent Canadians addressed gatherings in the United States: the Hon. Charles Stewart, Minister of the Interior; the Hon. William Finlayson, Minister of Lands and Forests for Ontario; the Hon. J. D. MacLean, Premier of British Columbia; the late Hon. T. A. Burrows, Lieutenant-Governor of Manitoba, and the Right Hon. Arthur Meighen, ex-Prime Minister of Canada. The United States reciprocated by sending Lieutenant-Governor W. I. Nolan, of Minnesota, and Colonel W. B. Greeley, Chief Forester of the United States Department of Agriculture, Washington, D.C., to speak before Canadian assemblies. In addition, Colonel Theodore Roosevelt, jr., was to have spoken at Ottawa, but was unfortunately taken ill at the last moment and could not fill his engagement.

A boys' and girls' vacation-camp lecture service was maintained as usual during the months of July and August. It was, unfortunately, impossible to provide a lecturer for every camp that asked for one, as a greater number of camps made applicatoin than ever before and, on the other hand, the department was able to secure only two lecturers instead of the three employed in other years. Nineteen camps were visited and contact made with 1902 children.

In the West, exhibition cabins to house the service exhibits at the annual agricultural fairs were completed at Brandon and Saskatoon, respectively. These two cabins have proved strong attractions and have received much favourable publicity in the newspapers; they present a more attractive appearance, with a greater adaptability to their use, than do the Calgary and Edmonton cabins, experience gained in the construction of these earlier cabins having shown the advisability of paying more attention to this aspect of the work. Exhibition activities were again extended to include this year six major (Class A), and twelve minor fairs. An exhibit was also placed in the log cabin at the Central Canada Exhibition at Ottawa.

Publicity work was also carried on by the staffs of the field offices. In Manitoba an effective display was made at the Western Canada Soil Products Exposition in Winnipeg in the month of February, at the Brandon (Class A) fair in July, where the new Forest Service cabin had lately been completed, and at the Dauphin and Swan River fairs. Co-operation was extended to the Canadian Forestry Association, and at the Dauphin Normal School weekly lectures were again given, as well as field excursions. Lectures were also given to public and high school classes and to service clubs and women's organizations. Much effort was also devoted to Canadian Forest Week in April.

In Saskatchewan, besides work for Forest Week and much incidental publicity work, exhibits were made at two class A fairs (Saskatoon and Regina) and seven class B fairs (Estevan, Weyburn, Yorkton, Melfort, North Battleford, Prince Albert, and Tisdale). Co-operation was also extended to the Canadian Forestry Association, especially in assisting in the work carried on by the staff of their fire-prevention car.

Publications

One of the most useful publications issued by this service is the pamphlet "Forestry Lessons" which was published in the autumn of 1928; this consists of a series of studies of the forest in its different aspects, and is intended for the use of teachers in their nature-study classes. A new edition (the eighth) of Bulletin 1, "Tree Planting on the Prairies," with various changes and additions to bring the matter up to date, was brought out. Results of work of the Forest Products Laboratories were published in Circulars 23 and 24—"Absorption of Moisture by Kiln-dried Lumber" and "Strength of Reinforced and Unreinforced Butter and Cheese Boxes," respectively—and the list of publications of the service was issued as Circular 25.

Canada's part in the program of the British Empire Forestry Conference, 1928, at Canberra, Australia, entailed the publication of a number of reports and papers. The chief of these was the quinquennial revision of the report on "The Forests of Canada," and the other papers presented were each published separately as pamphlets; these were "Tree Planting in the Prairie Provinces of Canada," "Timber Testing in Canada," "Timber Pathology in Relation to Wood Utilization in Canada," "Wood Preservation in Canada," "Forest Fire Protection in Canada: Progress Since 1923," "Pulp and Paper Research in Canada," "Timber Physics Research in Canada," "Silvicultural Research in Canada," "Aircraft in Forestry," "State Forests in Canada," and

"Softwood Resources of Canada." Dr. J. M. Swaine, Associate Dominion Entomologist, Department of Agriculture, collaborated in the preparation of the series by contributing a valuable paper on forest entomology in Canada.

Revenue

The revenue from all sources during the fiscal year shows a net increase of $22,429.10, this increase being substantially larger than any during the last five years. With the exception of the fiscal year 1926-7, when timber sales fell off temporarily, the annual revenue of the service has steadily increased.

The increase of $21,950.93 in revenue for timber sales, which is greater by $10,204.12 than the increase for 1927-8, was due chiefly to the introduction of Supervisors' sales.

The decrease of $8,927.91 in non-competitive timber permits was due to a lower demand in Manitoba and Saskatchewan. There was an increase of $1,911.64 in grazing revenue, principally from Alberta and British Columbia. There were, also, increases of $235 in hay, $1,544.86 in special uses, and $11,180.34 in miscellaneous revenue.

The kinds and total quantities of timber authorized to be cut from all reserves, the revenue of which is shown under the heading of "Timber Permits" in the statement of revenue, were as follows:—

Fuel-wood (cords)	32,953
Fence-posts, rails, and piling (number)	338,028
Fence-posts, rails, and piling (linear feet)	1,882
Telephone poles (linear feet)	1,740
Railway ties (number)	2,220
Saw-timber (feet board measure)	7,156,314
Mining timber (linear feet)	1,392,179
Building logs (number)	20,748
Building logs (linear feet)	171,212
Miscellaneous (linear feet)	1,150
Miscellaneous (cords)	103
Miscellaneous (number)	9,713

Seventy-eight new timber sales were awarded, an increase of seventeen over 1927-8. The dues payable amounted to $114,318.45, and $134,689.63, including arrears, was collected.

The kinds and amounts of material cut and scaled on national forests in connection with timber sales are shown in the following statement:—

Number of active sales		118
Sawlogs (feet board measure)		32,137,922
Piling (linear feet)		99,245
Mining timber—		
Lagging (linear feet)	399,956	
Other kinds (linear feet)	1,502,878	
		1,902,834
Ties, hewn (number)		86,368
Fence-posts, rails, and droppers (number)		28,841
Telephone poles (number)		381,780
Building material (linear feet)		580
Pulpwood (cords)		1,609
Fuel-wood (cords)		1,253

STATEMENT OF REVENUE, FOREST SERVICE, FISCAL YEAR 1928–1929

National forest	Number of timber sales operating	Revenue from timber sales	Number of timber permits	Revenue from timber permits, etc.	Number of grazing permits	Revenue from grazing permits, etc.	Other sources of revenue: Hay permits and seizures	Surface rentals	Special uses	Tree seed	Miscellaneous including fishing*	Total revenue all sources
Manitoba—		$ cts.		$ cts.		$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Duck Mountain	3	1,099 20	357	2,670 25	17	224 40	231 25	688 70	143 00	.....	3 00	5,059 80
Porcupine No. 1	2	1,792 00	81	956 09	1	11 00	19 50	.....	19 00	.....	120 00	2,917 59
Riding Mountain	1	6,069 90	1,347	12,618 46	18	170 90	529 50	1,420 05	219 00	.....	17 30	21,045 11
Sandilands	1	1,168 65	22	173 89	.....	.....	2 25	.....	4 00	.....	.....	1,348 79
Spruce Woods	.....	.....	9	21 00	.....	.....	11 75	5 00	.....	.....	.....	37 75
Turtle Mountain	.....	.....	34	145 65	25	251 00	58 25	48 31	18 00	.....	153 00	674 21
Manitoba Totals	**7**	**10,129 75**	**1,850**	**16,585 34**	**61**	**657 30**	**852 50**	**2,162 06**	**403 00**	.....	**293 30**	**31,083 25**
Saskatchewan—												
Beaver Hills	.....	.....	46	175 75	18	96 77	272 00	.....	.....	.....	.....	544 52
Big River	2	6,659 00	55	1,285 14	2	34 40	212 00	.....	37 50	.....	288 00	8,516 04
Dundurn	.....	.....	33	113 50	8	166 45	22 50	.....	6 00	.....	.....	308 45
Elbow	.....	.....	153	394 75	134	822 26	11 25	1 00	114 10	.....	.....	1,343 36
Fort à la Corne	5	425 38	244	1,614 03	1	2 44	16 00	1 00	16 00	.....	132 00	2,206 85
Keppel	.....	.....	4	9 00	77	514 43	7 00	.....	9 00	.....	.....	539 43
Manito	.....	.....	28	85 00	79	1,333 87	17 00	108 47	23 00	.....	.....	1,567 34
Moose Mountain	1	68 24	205	962 64	26	243 20	92 50	277 61	16 00	.....	785 00	2,445 19
Nisbet-Pines	2	934 50	292	1,820 05	17	207 82	117 00	.....	1,389 25	.....	.....	4,468 62
Pasquia	21	62,415 52	86	3,182 15	.....	.....	149 25	5 00	43 00	.....	416 00	66,210 92
Porcupine No. 2	8	3,710 29	215	1,852 72	6	93 40	334 50	138 00	170 00	.....	3 00	6,301 91
Seward	.....	.....	.....	.....	27	668 26	23 25	.....	26 00	.....	.....	717 51
Saskatchewan Totals	**39**	**74,212 93**	**1,361**	**11,494 73**	**395**	**4,183 30**	**1,274 25**	**531 08**	**1,849 85**	.....	**1,624 00**	**95,170 14**
Alberta—												
Athabaska	.....	.....	6	166 51	10	99 55	8 00	.....	28 00	.....	103 75	405 81
Bow River	2	2,208 90	56	463 71	78	4,254 12	33 00	1 00	18 00	.....	23 50	7,002 23
Brazeau	10	9,744 90	39	870 29	109	375 12	.....	999 77	35 00	.....	967 00	12,992 08
Clearwater	2	8,502 48	19	890 08	58	338 92	.....	564 23	20 31	322 50	188 75	10,827 27
Cooking Lake	.....	.....	5	18 00	39	336 00	135 75	.....	3 00	.....	156 00	648 75
Crowsnest	5	1,537 98	136	5,521 60	138	7,198 04	3 50	33 23	61 90	.....	355 00	14,711 25
Cypress Hills	1	66 00	397	1,977 74	107	1,907 61	.....	55 00	62 40	322 50	169 25	4,560 50
Lesser Slave	4	14,031 08	1	9 50	.....	.....	29 75	.....	13 00	.....	162 25	14,245 58
Alberta Totals	**24**	**36,091 34**	**659**	**9,917 43**	**539**	**14,509 36**	**210 00**	**1,653 23**	**241 61**	**645 00**	**2,125 50**	**65,393 47**
British Columbia Reserves—	36	14,255 61	23	223 69	72	1,499 73	43 25	416 58	258 51	7,732 10	3,806 18	28,235 65
British Columbia Totals	**36**	**14,255 61**	**23**	**223 69**	**72**	**1,499 73**	**43 25**	**416 58**	**258 51**	**7,732 10**	**3,806 18**	**28,235 65**
Indian Head Nursery	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	**6,169 70**	**6,169 70**
Forest Products Labs	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	**37 74**	**37 74**
Sundries	.....	.....	.....	.....	.....	.....	.....	.....	.....	**9 34**	**9,275 89**	**9,285 23**
Gross revenues	.....	**134,689 63**	.....	**38,221 19**	.....	**20,849 69**	**2,380 00**	**4,762 95**	**2,752 97**	**8,386 44**	**23,332 31**	**235,375 18**
Refunds	.....	**4,611 57**	.....	**1,140 87**	.....	**123 40**	**81 25**	.....	**4 00**	.....	**854 76**	**6,815 85**
Net revenues	.....	**130,078 06**	.....	**37,080 32**	.....	**20,726 29**	**2,298 75**	**4,762 95**	**2,748 97**	**8,386 44**	**22,477 55**	**228,559 33**

*Fishing, $1,968.30. Nursery stock, $4,231.75. Tests, $945.02. Miscellaneous, $4,724.57. Casual revenue, $8,066.51 House rental, $3,098.00. Fines and forfeitures, $10.00. Sale of equipment, $288.16.

IV

NATIONAL PARKS OF CANADA

REPORT OF THE COMMISSIONER, J. B. HARKIN

National Parks

General

The past year was one of continued progress in the National Parks of Canada. Each year it becomes increasingly evident that a new pride and interest is awakening in these great national possessions on the part of the Canadian people. The travel drawn from Canadian sources in the case of every one of the parks was heavier than ever before and registrations showed that it represented every province of the Dominion. Foreign travel was also greater and included representatives from over twenty countries. In spite of the fact that the early part of the season was unfavourable for motoring on account of continuous rain, motor travel surpassed that of the previous season which had been regarded as exceptionally large.

The total number of visitors to all parks was 488,600. The heaviest traffic was naturally recorded in the three-park unit formed by the Banff, Kootenay and Yoho national parks. The two first of these parks are traversed by both railway and motor highway. Although Kootenay park can be reached from Firlands on the Golden-Cranbrook branch of the Canadian Pacific railway ninety per cent of the travel is by motor. The total motor traffic through these three gateways was as follows:—

Kananaskis Gateway,			
Banff National Park—			
Canadian cars entering	32,982	Passengers	115,154
United States cars entering	2,015	Passengers	5,724
	34,997		120,878
Radium-Hot Springs Gateway,			
Kootenay National Park—			
Canadian cars entering	7,853	Passengers	25,864
United States cars entering	2,719	Passengers	7,414
	10,572		33,278
Leanchoil Gateway,			
Yoho National Park—			
Canadian cars entering	2,029	Passengers	7,290
United States cars entering	351	Passengers	1,032
	2,380		8,322
Total Canadian cars	42,864	Passengers	148,308
Total United States cars	5,085	Passengers	14,170
Total cars entering	47,949	Total passengers	162,478

In addition to the above many thousands of tourists arrived by rail. There is, however, as yet no way of recording this travel accurately as hotel registrations undoubtedly include a considerable proportion of motor visitors.

The motor campsites in these parks were crowded throughout the season. The road to the Tunnel Mountain campsite, Banff, was reconstructed so as to afford easier grades and this camp, which is one of the best equipped in Western Canada, proved very popular.

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The Banff-Windermere highway was opened for the season on May 17. Usually this road is closed early in November by winter snows. Last year, however, there was little snow during the autumn months and by ploughing small sections through the two passes the road was kept open until December 27, establishing a record season so far as length is concerned. In Yoho park travel was so heavy that it was found necessary to establish an additional equipped motor campsite about one mile west of Field near the Kicking Horse river, making three equipped camps now established in this park. Cars totalling 2,460 and carrying 8,861 persons registered at the three camps. A large percentage of travel to this park was drawn from the east, probably due to the fact that on the west no continuous motor highway yet connects the park with the coast. With the building of the proposed Big Bend road through connections will be established between Golden and Vancouver and heavy travel may then be expected from British Columbia and the Pacific Coast states.

Jasper park, as yet inaccessible by motor highway, had an exceptionally good season with 12,000 visitors. The Canadian National Railways again found it necessary to enlarge Jasper Park Lodge by the addition of a number of new bungalows and service buildings, at a total cost of $111,000.

Visitors to Waterton Lakes park numbered 26,002, nearly 12,000 more than during the previous year. These figures are particularly gratifying in view of the bad condition of connecting roads during the early part of the season and indicate the increasing popularity of this reservation. The Prince of Wales hotel, operated by the Great Northern Railway Company at Waterton lake, was open for the first time throughout the entire season and accommodated 5,784 visitors. Through bus service between Many Glaciers in Glacier national park, Montana, and Waterton as well as a regular boat daily between the two parks enabled an interchange of travel that was mutually beneficial. The recent improvements to the park roads and the townsite have added greatly to the appearance of this park.

Buffalo and Elk Island parks each showed a large increase in travel with 18,454 visitors to the first and 18,968 to the second. Both of these animal parks have attractive lakes with good bathing beaches which make them interesting objectives for parties motoring from the Prairies, and the number of people who make use of them in this way is increasing each year.

Point Pelee park in southern Ontario also had an unusually successful year, 12,525 cars carrying 50,100 persons entered the park. A large percentage of these were from United States points, indicating that this park is proving increasingly attractive to the people of the large cities, Detroit and Cleveland, and other places bordering the Great Lakes.

Sixteen thousand persons visited the Fort Anne park at Annapolis Royal; 15,050 went to Vidals Point recreational area in Saskatchewan, and 8,850 to Mount Revelstoke park in British Columbia.

One of the important events of the year was the opening of the new Prince Albert park north of Prince Albert, Saskatchewan. During the previous fall and early summer construction had been carried on at top speed on the road from the park gate to Waskesiu lake, the site of the park headquarters and its most popular resort. By August 1 this road was in fairly good condition and the province had also brought up to motoring requirements the old provincial road from Prince Albert north to the boundary. It was, therefore, decided to throw open the park to the public on the 10th of August. An interesting program of addresses and sports was arranged in connection with the event. The Right Honourable W. L. Mackenzie King, Premier of Canada, came from Ottawa to perform the opening ceremony and publicly dedicated the new park to the use and enjoyment of the people of Canada. The Prime Minister's fine address concluded with the following significant words:—

"In the building of Canadian national life and the moulding of our national character it is of utmost importance that we should cultivate an appreciation of all that is beautiful in our physical environment. In a young country so amply endowed with natural resources there is always a danger that we may turn to the gods of the market-place and sacrifice the beautiful on the altar of utility. In opening the Prince Albert national park we dedicate it to the glory of the Creator whose bounty it mirrors in forest, lake and stream, and to the highest good of the Canadian people for all time to come."

The Prime Minister's time was limited as he was leaving almost immediately for England, but he remained over night in the park and made use of the attractive bungalow presented to him by the citizens of Prince Albert district Between the date of the opening and the close of the season over 5,000 visitors entered the park—a large number, considering the fact that its reputation was as yet largely local and that parties travelling had to bring with them tents and camping equipment.

ENGINEERING WORK

No new construction work of importance was undertaken in the parks, appropriations being expended with a view to bringing existing highways and other services up to first-class condition. Now that motor travel to the parks has reached such large proportions the cost of maintenance grows heavier each year. Practically all roads within the parks are now of standard width and grade and well surfaced with gravel but each year general improvements such as widening curves, providing guard rails at dangerous points and strengthening of bridges where necessary are being carried out.

Access to Buffalo park at Wainwright has always been difficult during bad weather owing to the nature of the road. Last year, through the co-operation of civic officials of the municipality of Gilt Edge and the National Parks Branch, a good gravel road was built connecting the park with the townsite. A noticeable increase in travel immediately followed its construction.

In Jasper park the section of the Edmonton-Jasper highway from Jasper to the east boundary was completed, and as soon as the provincial road reaches the park this reservation will be accessible by motor travel. The journey along the Athabaska valley by this highway now makes one of the most popular excursions from Jasper town and nearly all visitors who remain any length of time in the park avail themselves of the opportunity of visiting Pocahontas and the eastern ranges, which are geologically among the most interesting in the park.

The three-mile section of road between Jasper and Jasper Park lodge, which had been experimentally treated with tar sand from McMurray during the previous two years, stood up well under exceptionally heavy traffic conditions. It seems apparent that this material will provide an excellent road surface, as durable as imported asphalt, and at less cost.

Work was continued on the new tote road to Athabaska falls and the most difficult section—from the Edith Cavell highway to the Athabaska flats—was completed. There is a drop in elevation of about four hundred feet from the highway to the river benches, but it was found possible to secure good grades. This road will not only be a great advantage in case of fire in the southern part of the park but it will also make it possible for a much larger number of visitors to see the beautiful Athabaska falls. It will further be of great assistance to parties going into the more remote regions, such as the Whirlpool sector, the Columbia Ice-field region, or up the Brazeau river. The tote road to Medicine lake was improved, widened in places, and fills strengthened.

The roads in Yoho park connecting with the main highway, particularly the road up Yoho valley, were improved and modernized so as to meet motor

requirements. Practically the whole of the Yoho road, with the exception of a short distance through the Yoho canyon, has now been brought up to standard. Similar construction has been undertaken on the Emerald Lake road.

Among other items of work, carried out under the direction of the Engineering Division of Head Office, were the following:—

In Prince Albert park, three contracts were let covering the construction of thirty-four miles of standard motor road from the south boundary to Waskesiu lake. The work included the erection of two truss bridges, one trestle bridge and several smaller bridges. Contour surveys were carried out of areas in the vicinity of the Narrows of Waskesiu lake, Prince Albert park, for subdivision purposes. An important reconnaissance survey of a proposed road on the south side of Waskesiu lake from headquarters at Primeau Landing to the Narrows, a distance of some eight miles, was made.

In Elk Island park a road from the Lamont entrance gate to Sandy beach on Astotin lake, four miles in length, was constructed. A survey for the location of the extension of this road around the south end of the lake to park headquarters was carried out.

The road up mount Revelstoke was extended one mile, the total length completed now being approximately nineteen miles. This carries the road past Balsam lake to the vicinity of Lookout point, its final objective.

Work was continued on the extension of the Jasper water distributing system, a total of 3,500 feet of six-inch main being laid, together with necessary house connections. Construction work on the new Jasper sewerage system was commenced late in the season, and 1,475 feet of fifteen-inch outfall main laid. This involved the driving of 450 feet of tunnel under the main line and yard tracks of the Canadian National Railways, and the installation of cast-iron pipe on this section. In addition 2,240 feet of street mains with necessary house connections were laid in the townsite. The topography of Jasper townsite necessitated laying the main sewer to a depth of from sixteen to twenty feet in difficult material.

In Kootenay park the bathing-house at Sinclair radium hot springs, commenced in 1927, was completed. The concrete bathing pool, supplied from the hot springs was enlarged to a standard section with maximum depth of eight feet. Surveys were made in regard to the generation of electricity for the townsite near Sinclair radium hot springs. A truss bridge was constructed over the Ottertail river on the Field-Golden highway, replacing a timber bridge.

In Waterton Lakes park construction work was carried out on the Akamina road, which is now passable for motor traffic to Cameron lake, and provides a new route to the passes of the southern Rockies.

An inspection was made for the Forestry Branch of the road situation in the Riding Mountain national forest, and recommendations made for its development.

Two wharves to accommodate large boats were constructed in the St. Lawrence Islands park, one at Cedar island near Kingston, and one at Broder island near Morrisburg.

In addition to the above construction work, maintenance work was carried out on all trunk roads in Kootenay, Yoho, Waterton, and Jasper parks, a total of 145 miles of motor highways. This work included painting, repairing and redecking bridges; construction and repair of culverts; repair work, regrading, gravel surfacing and widening where necessary.

Preliminary surveys were made looking towards a re-location of part of the park section of the Banff-Calgary road, with a view to securing a more scenic route and better grades on the last six miles approaching Banff.

Highway Construction.—The present mileage of roads, trails and telephone lines in the different parks is as follows:—

Park	Number of miles		
	Roads	Trails	Telephones
Kootenay	63·0	102·0	64·0
Revelstoke	19·0	32·25	17·25
Banff	127·0	766·0	197·25
Jasper	62·0	637·50	343·0
Yoho	50·0	159·0	44·5
Glacier	9·0	121·0	7·0
Buffalo	1·0	.....	34·5
Elk Island	11·2	.....	.....
Waterton Lakes	20·0	176·0	56·5
Prince Albert	34·0	7·0	81·0
Totals	396·2	2,000·75	845·00

RECREATION

Each year sees a wider interest in trail riding and alpine climbing and larger numbers are penetrating to the more remote regions away from the beaten tourist trails. These mountain pathfinders are not only enjoying the thrill of the explorer but they are adding each year to the store of knowledge concerning the mountains and helping to open up new fields of enjoyment for the general public. The two organizations which have contributed largely to this end are the Trail Riders' Club of the Canadian Rockies and the Alpine Club of Canada. The former, which has a membership of over one thousand is doing much to develop trail riding as a sport and to encourage the spirit of adventure among lovers of the Canadian mountains.

The objective chosen for the annual ride last year was the Lake of the Hanging Glaciers, a beautiful body of water lying in an Alpine cirque about 6,000 feet above sea level. This lake has at its head magnificent glaciers which project into the lake itself. Great pieces of ice break away continually from the tongues of the glaciers to form small icebergs which float about on its clear blue waters. About ninety riders, fifteen guides and a string of fifty pack horses made the journey to the lake from the end of the Banff-Windermere highway, Kootenay national park. The expedition was in charge of Lieutenant-Colonel Philip Moore of Banff and Mr. J. M. Wardle, President of the Trail Riders' Club. The wide-spread enthusiasm aroused by the club was shown by the fact that two riders came expressly from England for the meet, two from Bermuda, one from the Bahamas and about thirty from the United States, including several well-known artists and writers.

After visiting the lake the members of the club explored the Starbird and Tiger Claw glaciers with their remarkable ice caves, before returning to Banff and Lake Louise.

The Alpine Club of Canada also choose the Lake of the Hanging Glaciers as a site for their camp at the end of July, and by arrangements with the Trail Riders left their tents behind for the accommodation of the latter in the following week. This club, which has now been twenty-two years in existence, has contributed probably more than any other agency towards the exploration of remote and interesting parts of the Canadian Rockies and has developed and encouraged among young Canadians a love for the noble sport of mountaineering. There was an exceptionally large attendance at this season's camp and over ninety new names were added to the membership list. Mr. T. B. Moffatt of Calgary was elected president of the club. The graduation climb took place on The Dome, an interesting peak in the neighbourhood of the camp.

Winter Sports and Banff Carnival.—The attractions of Banff as a winter sports resort are also being more widely recognized and many visitors now spend a winter holiday in the park enjoying the clear mountain air and the exceptional opportunities for sport. The winter carnival was held as usual from February 2 to February 9. Owing to transportation difficulties the number of entries as well as the attendance lowered. The usual enthusiasm, however, was manifest; a fine program of sports was drawn up and the competitions were keenly contested.

The climatic conditions at Banff combined with the presence of hot springs are such as to make it one of the finest natural winter resorts on this continent and with time it must become as outstanding for its winter attractions as for those of summer.

Indian Days.—The annual summer fête of the Indian tribes in the neighbourhood of Banff known as "Indian Days" was held on July 25, 26, and 27. This annual festival dates back for many years and is eagerly looked forward to—particularly by the Stony Indians who have their reserve at Morley just east of the park boundaries. It offers visitors one of the most interesting events of the season at Banff. The Indians appear in all the glory of their ancestral finery of beads, buckskin, porcupine quills, ermine and eagle feathers. The parade in full dress costume is usually over a mile long with horses two or three abreast. Last year a very interesting program of horse races and trials of skill in archery, lassoing, and roping was carried out, and the entertainment also included a thrilling dramatization of an Indian story connected with the Indian war pony dance. Over 2,200 visitors were in attendance.

Scottish Festival.—The Scottish festival and Highland gathering, inaugurated under the patronage of His Royal Highness the Prince of Wales in 1927, was again held at the Banff Springs hotel in September, 1928. Several hundred Scottish-born Canadians and many others were in attendance and keen interest was manifested in the programs of Scottish music and ballad singing. Competitions in folksong music, pipers' bands, and Scotch dancing as well as the national games of putting the shot, tossing the caber, throwing the javelin, and the tug-of-war were keenly contested. Some of the best dancers in Canada also gave exhibitions of such national dances as the Highland fling, sailors' hornpipe, sword dance, Scottish reel, and the graceful Sean Truibhas.

This holiday festival of the arts which drew lovers of Scottish music and dancing from all over the country to spend a few days' holiday in one of the loveliest places in Canada is a significant event in the national parks. Visitors to the Canadian Rockies have sometimes compared the Canadian mountains unfavourably with the Swiss and Italian alps because they lack human background. A visit to the parks has hitherto been chiefly a feast for the eye. The beauty of nature and the additional charm which in some cases man has been able to add through architecture were the chief appeals. It is good to note that the parks are now becoming a centre of artistic interest through Indian folk music, ceremonies and handicraft, and also through Scottish folk art and games. There is, perhaps, no place in the Dominion so suited to become a background for artistic performances, and it is hoped that as time goes on the parks may become more and more the scene of other art festivals, which will help to enrich not only the interest of the parks themselves but the general cultural life of Canada.

Regatta on Lake Minnewanka.—The annual regatta on lake Minnewanka was held in the middle of August. An interesting program of boat races and surf riding was carried out before a large attendance of visitors. The lake is specially adapted to sport of this nature and it is expected that the regatta will become one of the permanent features of the summer season.

Golf Links.—During the entire summer season work was carried out by the Canadian Pacific Railway Company on the remodelling of the golf course at Banff, formerly operated by the Government. When completed, this course will rank with any on the North American continent, both as to scenic setting and sportiness. It occupies practically the same ground as the old course, but marked improvements have been made in laying out new fairways, and in bringing the old terrain up to present-day standards. Such good progress was made that the use of the temporary nine holes was abandoned and play commenced over the new eighteen-hole course in August.

The first tee of the new course is situated a few yards from the Banff Springs hotel. The professional's quarters and the first tee are on a shelf cut into the bank of the Spray river and the first drive carries across the Spray river to the fairway on the opposite side. There are two other water hazards on the course. The eighth hole is played across Devil's Cauldron, a shallow lake set in a cup-like depression, while one of the home-coming holes is played across an elbow of the Bow river.

No effort has been spared to make the course one of the very finest, and while it is sporty enough for championship play, there is no part of it too difficult for the beginner.

MARKING OF HISTORIC SITES IN THE PARKS

On July 14 a cairn and bronze tablet were erected in Jasper national park to commemorate the site of the famous Jasper House founded in 1813 and which for so long was the centre of life in the Athabaska valley. Jasper House was established by the Northwest Company at the north end of Brûlé lake during the eventful years when the struggle between that company and its famous rival, the Hudson's Bay Company, was at its height. Jasper Hawes, from whom the park derives its name, was the first clerk in charge of the post, which came to be known as Jasper's House, later Jasper House. Between 1827 and 1829, following the amalgamation of the two great companies, it was removed to the west bank of the Athabaska, opposite the mouth of the Rocky river, where for many years it was a centre of activity. Practically all early travellers called at this post and many famous names are associated with it.

The unveiling ceremonies were performed by Mrs. Knight, wife of the Acting Superintendent of the park, and addresses were delivered by Mr. J. A. Jaffray, Archivist to the Alberta Government; His Honour Judge F. W. Howay, of New Westminster, representing the Historic Sites and Monuments Board of Canada; and Mr. W. Thompson, head of the Publicity Department of the Canadian National Railways. The bronze tablet bears the following inscription:—

> "Jasper House. Built by the Northwest Company about 1813, at the northern end of Brûlé lake. Some time between 1827 and 1829 it was rebuilt near this site. For half a century it was a main support of the trade route across the mountains and an important point for all persons journeying through the Yellowhead and Athabaska passes."

Simpson Memorial.—A boulder monument in memory of Sir George Simpson, Governor of the Hudson's Bay Company from 1821 to 1860, was unveiled in Kootenay park on September 17. In the course of his famous journey around the world, 1841 and 1842, Simpson travelled through the Banff park by way of Pechee gap, lake Minnewanka and Banff, crossing the mountains by the pass which now bears his name. At Simpson summit he made camp and cut his initials on a neighbouring tree, recording in his diary his sense of awe amid the magnificence of his surroundings. Previous to Simpson practically all early travellers had used the northern route, but his expedition called attention to the possibility of utilizing the southern passes. The Historic Sites and Monuments Board considered that a tablet should be erected memorializing

this crossing of the mountains and it was first proposed that a monument should be placed at the summit of the pass itself. The comparative inaccessibility of this spot, however, made it appear likely that the memorial would be seen by a very small number and it was, accordingly, decided to erect it at the junction of Simpson creek and Vermilion river, the end of Simpson's descent of the western slope. As it happens, this junction lies in Kootenay park immediately adjoining the well-known Banff-Windermere highway, a spot in full view of hundreds of passing cars each day. The unveiling ceremony was performed by the Governor of the Hudson's Bay Company, Charles V. Sale, of London, England. His Honour Judge F. W. Howay, of New Westminster, British Columbia, representing the Historic Sites and Monuments Board of Canada, delivered an address, while Mr. T. C. Elliott, of Walla Walla, State of Washington, one of the outstanding historians of that State, represented the Washington Historical Society. The memorial consists of a cairn of rough boulders and a bronze tablet bearing the following inscription:—

> "In recognition of the public services of Sir George Simpson, Governor of the Hudson's Bay Company Territories (1821-1860), under whose guidance the 'Far West', the 'Far North' and Arctic coast were explored, peace with the natives was maintained, trade developed and British rule strengthened.
>
> "In August, 1841, he was the first white man to cross the Rocky Mountains by Simpson Pass."

SURVEYS IN THE PARKS

The topographical survey of Banff and Jasper parks which was resumed in 1927 with two parties of surveyors of the Topographical Surveys Branch, Department of the Interior, was carried on through the season of 1928. The whole of Banff park has now been surveyed and good progress was made with the survey of Jasper park. It is estimated that two more field seasons of both parties will be required in order to complete the survey of Jasper park. An examination was made of the north boundary of Jasper park for the purpose of completing the report on the general readjustment of the boundaries of Banff and Jasper parks along the lines proposed by the Minister of the Interior in 1927. Another investigation was carried out of the two alternative areas suggested for a national park in the province of Manitoba. The reports concerning these matters are now receiving the consideration of the department.

PRESERVATION OF WILD LIFE

The success of the sanctuary conditions existing in the national parks has long since been established by their results. Wild life in general appears to be almost everywhere on the increase, both within the parks and in the areas immediately adjacent thereto. Sheep are now found in all parts of the parks on the eastern slope of the Rockies, and up to the present they appear to be free from disease of any kind. Bear are becoming exceedingly numerous and are so tame that they are seen by practically every visitor who leaves the main roads and goes out along the trails. While they are almost never dangerous unless molested, their depredations about camps sometimes render them a nuisance and in several cases, for the protection of property, they have had to be destroyed. Beaver are undoubtedly on the increase, particularly in Jasper park, which appears to be a natural home for them. The elk imported from the Yellowstone national park continue to do well and are spreading out into new areas in both Banff and Jasper parks. Fur-bearers are also reported to be on the increase, though undoubtedly the larger predatory animals such as lynx, wolverine, and coyote keep down their numbers.

Buffalo.—The government buffalo herds are now in a very satisfactory and thriving condition. The extension of the boundaries of Elk Island park provided much-needed pasturage for the increasing numbers of this herd. The continued thinning of the herd at Wainwright park has also had most satisfactory results and the pasturage in those sections of the park which had been denuded of grass through over-grazing is now coming back. The buffalo show the results of these improved conditions and last winter the whole herd came through in splendid shape. Following the policy adopted in the past few years, shipments totalling 1,088 animals were made throughout the summer to the Wood Buffalo park near Fort Smith, Northwest Territories. Reports show that the buffalo transported in former years to this region are doing well and have successfully adapted themselves to the new environment and conditions. The strength of the herd at Wainwright at the close of the fiscal year was approximately 4,300 animals. During the year an addition of one square mile was made to Buffalo park at Wainwright. The extension brings the boundaries of the park down to the main line of the Canadian National Railways, and makes it possible for transcontinental travellers to see the buffalo from passing trains.

The Government was able to meet requests from several outside sources for wild animals for exhibition or breeding purposes. A pair of young buffalo were presented to the city of Johannesburg, South Africa, for the Zoological Gardens there, and arrived in good condition. Three buffalo were also forwarded to the Italian Government. These also bore the journey well and arrived in good condition. Six buffalo, three elk, and three mule deer from Wainwright park were presented to the Wild Life Animal park, Moose Jaw, Saskatchewan. A number of donations were also made from Banff park: these included one pair of Rocky Mountain sheep and one pair of beaver to New Zealand; two pairs of Rocky Mountain sheep to Melbourne, Australia; one Rocky Mountain ram to the Zoo, Edmonton, Alberta; five Rocky Mountain ewes and two rams to Medicine Bow national forest reserve, Wyoming, U.S.A.; five Rocky Mountain ewes and two rams to the Wichita national forest, Oklahoma, U.S.A.; one pair of Rocky Mountain sheep to the Moose Jaw Wild Life Animal park; one brown bear to Calgary, Alberta; one pair of beaver to the Zoological Society of Scotland, Edinburgh.

Antelope.—The antelope herd in the Nemiskam park, Alberta, suffered a severe setback in December, 1927, when during a heavy snow-storm part of the fence was broken down and more than half of the herd wandered out beyond park boundaries. During the past summer every effort was made to recover as many of the animals as possible, but unfortunately over 200 remained uncaptured. At the end of the year there were 247 antelope in the park. The increase this year was not so large as usual due to unusually severe weather in November and December which affected both the wild and enclosed herds.

Fish.—The restocking of lakes and streams in the parks was again carried on through the valuable assistance and co-operation of the Department of Marine and Fisheries, which now maintains hatcheries in Banff, Waterton Lakes, and Jasper national parks. Over 1,110,000 cut-throat trout fry were distributed from the Banff hatchery; 4,577,000 Lock Leven trout fry; 5,550,000 rainbow trout fry; and 319,670 brown trout fry. Practically all the streams in the Banff park suited to fish life were stocked and shipments of fry were also placed in the main waters of Yoho and Waterton Lakes national parks. In June under the direction of the Biological Board of Canada, and following out recommendations submitted after two years' investigation of the waters of Jasper park, 250,000 trout fry, which had been hatched in the temporary hatchery at Jasper, were transported by pack-horse to Maligne lake. Although the weather was extremely cold at the time the transplanting was successfully carried out and at the end of the season the fish were found to be over three

inches in length. A further shipment of speckled trout eggs was forwarded to Jasper in January, 1929, where the eggs were hatched in a similar way. These will be transported to Maligne lake and deposited there this spring when the ice goes out. In Waterton Lakes park the usual shipments of fry were received through the kindness of officials in Glacier national park, Montana, and these were liberated in the Waterton lakes and tributary streams. The small hatchery erected in this park last year proved its usefulness and was able to supply several thousand trout fry for the waters of the park. It is expected that the fish from the hatchery which will be spared the shock of the long journey from Banff will thrive better than those introduced in former years from that park.

FIRE PROTECTION

The season was an exceptionally favourable one for forest protection. Owing to the heavy rains during the spring months practically no fires occurred of any importance. In the autumn conditions became less favourable and there were a few outbreaks, but these were not serious with the exception of one in Banff national park and one in Prince Albert park. The latter threatened to assume alarming proportions but due to the prompt action on the part of the wardens was extinguished without serious loss.

The fire equipment in all the parks is each year being added to and is now reasonably adequate for any demands likely to be made. It includes: 76 portable pumps, 35 light twin pumps, 9 heavy pumps, as well as boats, railway speeders, velocipedes, out-board motors, etc.

The numbers of fires, the areas burned over, and the cost of extinguishing is shown by the following tables:—

RAILWAY FIRES DURING 1928-29

Park	Number of fires	Area burned	Cost of extinguishing
		acres	$ cts.
Jasper	7	36½	17 00
Banff	3	¼	3 10
Yoho	1	.....	5 50
Totals	11	36¾	25 60

GENERAL FIRES DURING 1928-29

Jasper	1	.....	2 35
Banff	21	2,881¼	6,481 76
Yoho	4	.....	179 38
Buffalo	1	½	1 50
Kootenay	12	.....	.....
Point Pelee	2	505	.....
Prince Albert	8	25,369	977 99
Totals	49	28,755¾	7,642 98
Grand totals all fires	60	28,792¼	7,668 58

The mileage patrolled by the wardens totalled 291,382.

Five new warden's cabins were built during the year bringing the total number now in the parks to 119.

New telephone mileage totalled 18·5.

New trails were constructed as follows:—

Park	Trail	Miles
Glacier	Mountain creek	5
Jasper	Jasper lodge	3
"	Maligne river	2½
"	Jacques lake	18½
Banff	High water	1
"	Spray river, East side	4
"	Taylor lake	4½
"	Sundance	3½
"	Mistaya	6
Mount Revelstoke	Clach-Na-Cuddin	2½
Waterton Lakes	Carthew	3½
Yoho	Emerald lake	4

The total mileage of trails now in the parks is:—

Park	Miles
Glacier	121
Jasper	637½
Kootenay	102
Mount Revelstoke	32½
Prince Albert	7
Banff	766
Waterton Lakes	176
Yoho	159
Total	2,000½

LANDSCAPE AND ARCHITECTURAL WORK

A very large number of plans of buildings proposed to be erected within the various national parks by private owners were examined, and in the majority of cases drawings showing suggested revisions of elevations were prepared with a view to improving the external appearance without adding to the cost of the building. In a considerable number of instances, entirely new designs for various types of buildings were prepared at the request of the intending builder. Such buildings comprised, principally, residences and stores, but included also hotels, theatres, banks, churches, lodgerooms, tearooms, service stations, and public garages.

Working drawings, details, and specifications were prepared for the following:—

Addition to R.C.M.P. Barracks building, Banff.
New detachment buildings for R.C.M.P., Canmore.
Buildings for camp grounds, Banff.
Addition to officers' residence, R.C.M.P. Barracks, Jasper.
Residence for Superintendent, Kootenay park.
Garage, Kootenay park, for Superintendent.
Residence for Superintendent, Prince Albert park.
Garage for Superintendent, Prince Albert park.
Warehouse building and boat-house, Prince Albert park.
Addition to Administration building, Waterton Lakes park.
Addition to Community building, Waterton Lakes park.
New tourist bureau, Waterton Lakes park.
Slaughtering plant, Elk Island park.
Pavilion, Broder park.
Shelters at Vidals Point recreational area, and St. Lawrence Islands park.

A number of plans for new subdivisions were prepared, notably those at Prince Albert park. Plans for the proposed layout of grounds at the Great Divide, for a proposed memorial park at St. Albert, and a zoning plan for Banff were made.

PUBLICITY

Active work was carried on by the Publicity Division during the year. It consisted of public lectures in Canada and the United States, the issue of attractive publications, the loan of prepared lectures, preparation and distribution of

moving pictures, and the furnishing of articles and memoranda to writers, magazines and the daily Press. The number of lectures delivered during the year was 148. Moving pictures shown outside the office 646, within the office 1,299, loaned 212. The Photographic Library was increased by several hundred negatives and 18,544 new prints were added to the collection. Prints distributed totalled 18,830, enlargements 1,812, transparencies 73; 2,263 coloured slides were also added to the collection, 68 prepared lectures with slides were loaned, and 382 articles distributed. To meet the increasing demands for publications several editions of the existing pamphlets were ordered. These included *The Kicking Horse Trail* 24,700, *Information for Tourists* 51,500, and *Kootenay National Park and the Banff-Windermere Highway* 20,150.

A pamphlet concerning the new Prince Albert national park was prepared and printed; 50,000 copies of a small *Guide to Rocky Mountains Circle Tour* were issued, and a new edition was also printed of the *Guide to Fort Anne.*

REVENUE

Revenue collected by the National Parks of Canada during the fiscal year ended March 31, 1929, amounted to $237,470.35. The following statement shows the various sources from which the revenue was obtained and the individual amounts:—

Source	$ cts.
Banff park	150,963 10
Jasper park	29,994 39
Waterton Lakes park	5,622 08
Yoho park	3,223 17
Glacier park	166 14
Elk Island park	5,993 15
Buffalo park	23,561 61
Kootenay park	13,729 64
Prince Albert park	379 77
Fort Anne park	6 00
Point Pelee park	607 37
Historic sites	32 00
Fines and forfeitures	2,590 93
Migratory birds	74 00
Brereton Lakes park	10 00
Vidals Point recreational area	72 00
Lake Florence	60 00
Antelope reserve	384 00
Miscellaneous	1 00
Total	$ 237,470 35

WORLD WIDE MOVEMENT FOR LANDSCAPE PRESERVATION

The awakening interest in the national parks, and the growing demand for the creation of new ones, from practically every part of the Dominion, indicate a new interest in landscape preservation which is clearly awakening in almost every part of the world to-day. No doubt, largely as a result of the immense growth of motor travel and the increased use of highways, there is growing up a new interest in natural beauty and a desire for the preservation of the countryside. A great deal is being done in this direction in England and in such countries as France, Switzerland, and Italy. The National Trust in England, incorporated in 1907, is empowered by an Act of Parliament to hold for the public good buildings of historic or architectural interest and places of striking natural beauty. While England has practically no wilderness areas left to conserve, the spirit behind this movement is closely allied with the policy of the national parks movement in Canada. In the United States the national parks are coming more and more to be recognized as parts of a larger scheme of landscape and scenic conservation and development, which cannot stop until it is nation-wide.

VALUE AND PURPOSE OF PARKS

While it is possible in an annual report to give some account of the visible work performed by the various staffs in charge of administration, it is very difficult to set forth the important work that is being accomplished in the parks in so far as the health and happiness of the people is concerned and in the betterment of national life. The economic values of the parks as a means of attracting tourist travel have been pointed out many times before. So long as the national parks movement was in its infancy it was perhaps necessary to emphasize this aspect of their value. To-day, when this is so widely recognized, it is perhaps permissible to point out that there are other values, equally if not more important, in the long run. Already the national parks are arousing a new love and pride of country. They are stimulating a love of natural beauty and enjoyment of the wild places of this continent. Like great works of art, they are enriching the emotions and stimulating the imaginations of many and so helping to build up that finer cultural background which is necessary if Canada is to be a great nation among the nations of the world.

Scenic Parks

BANFF NATIONAL PARK

Banff national park formerly known as Rocky Mountains park had again a most successful year. Tourist travel was the heaviest yet recorded both by rail and motor. The total number of cars, east bound and west bound, passing through the Kananaskis gateway was 67,836 an increase of 14,473 cars over the previous year. The heaviest registrations were as usual from the four western provinces, showing that the park is fulfilling a democratic use and serving to meet the recreational needs of the western half of the Dominion. A new daily record for the number of cars passing through the Kananaskis gateway was established on July 2 when 2,088 cars registered travelling in both directions as compared with the previous record of 1,533 cars on July 3, 1927. A new week-end record was also established from June 30 to July 2 when 4,184 cars passed through this gateway as compared with the previous week-end record of 3,731 in both directions established July 1-3, in 1927.

Coincident with the large increase in motor travel has been the number of bathers at the government hot springs. At the Cave and Basin bathing-house registrations showed 71,952 as compared with 66,233 in the previous year, an increase of 5,719. The number of visitors to the Cave, adjacent to the hot springs, was 69,209. At the Upper hot springs the total number of bathers was 47,536 as compared with 41,055 for 1927-28, an increase of 6,481. The new motor campsite at Tunnel mountain also showed increasing popularity. During the season 7,271 cars and 26,095 persons camped at this site as compared with 6,017 cars and 21,620 persons in the previous year. A new record was established at this campsite on the night of July 15, 1928, when 685 cars and 2,940 persons were accommodated.

Museum, Zoo and Animal Paddocks.—For some reason less interest was manifested in the Banff Museum; the number of visitors totalled approximately 21,000 as compared with 30,000 in the previous year. The season of 1927-28, however, had shown an increase in visitors of 100 per cent so that a certain falling off was to be expected. The Banff Zoo was again the centre of interest for thousands of visitors to Banff. The number of animals now encaged includes: 1 polar bear, 2 grizzly bears, 3 black bears, 1 cinnamon bear, 2 mountain lions, 1 Canada lynx, 1 bobcat, 4 timber wolves, 4 coyotes, 1 wolverine, 1 badger, 2 martens, 2 gophers, 1 porcupine, 2 great-horned owls, 1 peacock, 2 golden eagles and 3 Canada geese. The exhibition herds of animals in the pad-

flocks are in good health. At the present time they include 20 buffaloes, 21 elks, 12 Rocky Mountain sheep, 7 angora goats, 9 four-horned sheep, 1 Rocky Mountain goat and 6 yaks.

Permits and Licences.—Permits and licences covering the various business activities carried on in the park totalled 18,647. Of these 16,709 were motor licences for transients. Motor licences for park residents numbered 580; guides' licences 44; chauffeurs' licences 283; restaurant and tea room licences 40.

Fire Protection.—Owing to the wet spring the fire hazard was greatly mitigated during the tourist season. A few small outbreaks occurred but caused no serious damage. The Banff Volunteer Fire Brigade responded to 11 alarms, total losses amounting to $1,079.

The brigade now numbers 24 officers and firemen. A night patrol was maintained by the local detachment of the R.C.M.P. in the townsite.

Mosquito Control.—Owing to a late spring, mosquito larvae first appeared about the end of April, over a month later than usual. On April 26 three men were set at work distributing oil over the areas affected. An additional man was sent out on May 29 and work was carried on till the end of July. A total of 2,785 gallons of oil was used and about four pounds of pyrethium. The latter appears to promise good results. Mr. Arthur Gibson, Dominion Entomologist, and Mr. Eric Hearle, assistant, in charge of the work at Banff, made an inspection of the progress of the campaign in the park. Satisfaction was expressed that the fish *"Gambosia affinis,"* which had been deposited in the small pool above the Cave and Basin bathing-house some years ago, have multiplied tremendously and are now found in great numbers in Sulphur swamp below the Cave and Basin. These fish are the greatest natural enemies known to the mosquito larvae and if it is possible to acclimatize them so that they will live in these cold-water swamps, a great decrease in the mosquito nuisance will undoubtedly result.

Public Health.—The public health was very good in Banff during the past year. The regular garbage collections were made during the summer. The dairy herds in the national park were tested during the year with the intradermal test for tuberculosis and all were found healthy. Samples of milk and water were also submitted periodically for analysis and the returns were satisfactory in every case.

JASPER NATIONAL PARK

Jasper park had a year of great activity. The total number of visitors was placed at 12,000, of these 7,568 registered at Jasper Park Lodge. This hotel was crowded through the season and it was again found necessary to increase the accommodation. The new golf links in this park attracted a great deal of notice among expert players, many of whom spent their holidays in Jasper upon the links.

Many improvements were made in Jasper townsite to accommodate its rapidly increasing population. The system of boulevards begun on a number of streets last year was completed, additional six-foot sidewalks extending more than a mile and a third were laid, a large number of pine and spruce trees and ornamental shrubs were planted, and enamel street signs erected. The electric and water services were considerably extended and four new hydrants erected, making a total of 18 now in the townsite.

New Buildings.—Building operations in Jasper included 14 new residences, 8 stores and business premises, 1 new bank, 1 new church and a number of garages and small buildings. The estimated cost was approximately $150,000. In addition the Canadian National Railways took out permits for extensions including 4 four-room cabins, 3 ten-room cabins, 1 twelve-room officers' cabin, 1 sixteen-room help building at a total cost of $111,000. A new log chalet of substantial design was erected at Maligne lake and a tea room near mount Edith Cavell.

Roads and Bridges.—The experimental stretch of tar pavement surfaced with McMurray tar sands on the Maligne highway between Jasper and the Lodge, stood up well. On the rest of the road gravelling was done where necessary and at Mile 7½ relocation was made, straightening a bad curve; 710 feet of guard rails were erected, and 100 feet of cribbing put in. The Edith Cavell road was in good condition during most of the season with the exception of the last few weeks. Additional guard rails to safeguard traffic were constructed on the Astoria hill.

A new bridge with concrete abutments was erected over the Miette river as the old log bridge at this point had become unsafe. The central span is 90 feet clear. The wooden bridge spanning Cottonwood creek was extended to a width of 18 feet and the last section of the highway widened to bring it up to a standard width. Construction was undertaken of a tote road from the Astoria bridge on the Edith Cavell highway down the steep and irregular slope to the Athabaska river, and along the flats for three-quarters of a mile. From this point cutting and clearing work was done, joining up with work done last year near Smoky Hollow. The continual wet weather in the early spring undermined the side banks along the tote road to Medicine lake and a great deal of attention was necessary to keep it open for travel. This road was in continual use by cars and proved of great convenience to tourists. A new horse trail and footpath which will add to the pleasure of visitors was constructed from a point near the railway crossing at Jasper to Jasper Park Lodge. Another popular trail was that constructed from the Maligne canyon down the Maligne river to the existing bridge, near its mouth. This trail furnishes a delightful morning or evening canter. Bridges over Maligne canyon were strengthened and a guard rail was erected on the sloping rock bank just below the Tea Room, where one of the finest views of the canyon may be obtained. A standard trail was commenced from Jacques Lake cabin down Jacques creek and south east along the Rocky River valley. It is intended to extend this trail next year to the Rocky River cabin, Number 7, about 12 miles from the present end of the trail. There are now 360½ miles of standard trails in Jasper park; and 277 miles of "pack", or second class trails. A new trail bridge was built over the middle fork of the Whirlpool river on the old trail leading to the Committee Punch Bowl. Telephone lines in the park now total 343 miles. New buildings included new warden's cabins at Devona and Snaring, a government stores building at Jasper, and an implement shed.

Sanitation.—A new sewer was constructed and the usual routine of garbage collection, cleaning up of lanes, and removal of ashes was carried on during the year.

Horses.—There are now seventy-four draught, saddle, and pack horses and four colts in the government stables and corrals in Jasper park.

Fires.—There were seven railway fires during the season, all of which were caused by sparks from locomotives. The areas burnt over totalled approximately 36½ acres and the cost of extinguishing was $17. A few small outbreaks occurred in the townsite, but these were promptly extinguished by the wardens and fire brigade before any serious damage was done.

Wild Life

A steady increase in all species of game is noticeable in the park and the young appear to be healthy and in good condition. Owing to the heavy rainfall in the early summer months, grazing was good everywhere and the animals came though the year in an unusually good condition.

Elk.—Elk are noticeably increasing and are finding new feeding grounds all over the park. Large herds have been seen almost daily at Cabin creek, near

the golf course and along the Athabaska and Miette valleys. The largest herd ranges between Pyramid mountain and Cabin creek. The supervising game warden estimates that there are between 2,000 and 3,000 now in the park.

Sheep.—There was an average increase in sheep during the year. They are now spreading all over the park wherever they can find suitable ranges. Practically all the ranges from Sunwapta to Brûlé are sheep-feeding grounds, and a large flock has been seen regularly at Cavell bridge on the motor highway, where they are a great attraction to tourists. Large flocks were also seen at Pocahontas, Brûlé, the shale banks of the Snake Indian river, along the Snaring river, at Buffalo prairie, and Brazeau lake. A very fine herd of from 70 to 100 can be seen almost daily on the Maligne range. Hunters north of Jasper park this season spoke in high terms of the satisfactory overflow of sheep from the park to these areas. It is estimated that there are approximately 18,000 sheep now in the park.

Goat.—Goat are also multiplying rapidly and are in fine condition. A large herd is almost always to be seen at the shale banks of the Snake Indian river and others on the Smoky river, on mount Kerkeslin and the Colin range. They are also found in increasing numbers between Circus valley and Whistler mountain, but there they keep to high altitudes. From 4,000 to 5,000 are believed to be within the park.

Bear.—Black and grizzly bear are increasing everywhere. The latter seem to be more numerous on the Moosehorn creek but they are difficult animals to keep track of as they travel widely and it is believed that those seen in the Snake Indian may range as far as the Moosehorn valley. The whole of the park is adapted to grizzlies and they travel in and out of the park according to food and weather conditions. The number of bear in the park is placed at from 3,000 to 4,000.

Moose.—Moose are very plentiful and are now ranging in practially every valley. A particularly fine bull was seen on the townsite of Jasper last summer. Hunters have reported also that fine specimens have overflowed from the park on the northern boundary. Their numbers are placed at approximately 8,000.

Deer.—The season was particularly good for deer and they showed a marked increase. They now inhabit practically every valley in the park and are especially numerous along the Athabaska. The wardens estimate that there are 20,000 deer in the park.

Caribou.—Caribou are in good condition. They are found along the northern boundary near Byng pass and Twin Tree lake. Quite a few are also to be seen along the Smoky river and there are fully 300 in the Tonquin valley. Fine heads were brought in by hunters from the hunting grounds north of the park during the past autumn. It is difficult to arrive at the number of caribou in the park but the wardens consider 8,000 a fair estimate.

Fur-bearing Animals.—Beaver, marten, lynx, and coyote are reported to be more numerous and fresh beaver houses and dams were noticed on several creeks.

Game Birds.—Game birds, such as partridge, grouse, and prairie chicken, appear to be suffering a good deal from the increase of marten, lynx, and other predatory animals and the wardens report that they were seen in much smaller numbers this year.

Fish.—Fishing was reported as very good. Fine catches were made at Caledonia lake, Wabasso lake, Jacques lake, at Buffalo prairie and in the Brazeau and Upper Snake Indian rivers. The speckled trout fry deposited in Maligne lake in June did exceptionally well. A further shipment of 250,000 eggs was received in January. These are now being hatched and will be deposited in Maligne lake as soon as the ice goes out.

Alpine Climbing.—Dr. S. Kitada of the Imperial University of Japan, noted Japanese climber, spent some time in the park and made a record ascent of mount Edith Cavell in four and a half hours by the east ridge. Dr. Kitada plans to return with a party of students next year and to visit the Columbia Ice-field.

WATERTON LAKES PARK

Until this year the roads leading into Waterton Lakes park were not of a satisfactory character. While they were in good condition during the dry weather, in heavy rains they became almost impassable. Last year, however, the road from Cardston to the park, which connects with the motor highway leading into the United States, was gravelled by the provincial authorities as well as the provincial road from Cardston to Macleod. The park was thus connected with roads to the south and with a good gravel highway as far north as Edmonton. While the weather was unfavourable during June, the months of July and August were extremely pleasant and in consequence the park had the heaviest season in its history.

In the townsite the streets were kept in good condition, necessary grading and gravelling were done and the dust nuisance was kept down during the dry weather by the use of oil. New sidewalks were laid, tree planting along the streets was continued and an attractive display of flowers was maintained in the flower beds throughout the season.

The Prince of Wales hotel was opened for the first time for the entire season and for a great part of the time was filled to capacity. New buildings included a barracks for the Royal Canadian Mounted Police, which was surrounded with well laid out grounds; a new fish hatchery near the Pincher Creek entrance to the park and a number of new cottages.

The Waterton Lakes hotel was practically reconstructed during the year and a new wing added. An addition was also made to the park administration office and the golf club house. The roads within the park were maintained in good condition and improvements were undertaken on the Pass Creek road which is one of the most popular drives in the park. This road now gives ready access by automobile to the interesting Red Box canyon, which is always an interesting objective for tourists.

Further surfacing and completion work was done on the Akamina road and cars can now travel in comfort ten miles to Cameron lake, one of the beauty spots of the park and a favourite resort of anglers. A new trail was constructed to Carthew lake opening up a section of the park previously unknown to the tourist.

The golf club and tennis courts were well patronized as were also the bathing-house and bathing-beach at Linnet lake. Fishing in the main lake and in the various smaller lakes and streams was stated to be exceedingly good while fine catches were reported from Cameron lake, Bertha lake, Twin lakes, Belly river and from Pass creek.

A through bus service was maintained during the season connecting this park with Many Glaciers in the United States Glacier national park and hundreds of visitors availed themselves of this opportunity of visiting the adjoining playgrounds. A new motor launch capable of carrying 250 persons was also placed upon the Upper Waterton lake and made trips daily between the two parks.

Wild life of many kinds appears to be on the increase. Black bear, coyote, and weasel are plentiful in all districts. Mule deer and elk are to be seen in good numbers, while rabbits are not so numerous as last season.

There would appear to be a decrease in the number of mountain sheep this year. This is no doubt due to a series of spring storms which reduced the number of young lambs and proved dangerous to the mothers. Goat appear to be holding their own; bear and elk are noticeably on the increase. Beaver are particularly numerous and it is estimated there are now 1,500 in the park.

KOOTENAY NATIONAL PARK

The Banff-Windermere highway opened early in May and travel at once began to the park. No register is kept of cars entering at the Vermilion Summit boundary since these have already registered at the Kananaskis or Leanchoil gateways. Registrations at the Sinclair Canyon gateway are given in the traffic tables at the beginning of this report.

The new bathing-house at the Sinclair Radium hot springs was completed and opened to the public on June 1. From that date to the end of the season, 21,038 bathers made use of the baths. During the month of October the bathing-house was closed to allow the making of an extension of thirty feet to the pool, bringing the total length up to one hundred and ten feet.

A new parking area in the immediate vicinity of the springs for the use of visitors to the baths was cleared. Improvements were made to the existing Floe Lake trail and a new trail was constructed from McLeod meadows to the park boundary up Deer creek. Sinclair Canyon campground proved very popular and was filled to capacity every night during the holiday season. One new camp shelter was erected at Dolly Varden creek.

No fires of any importance occurred in the park. There were several small outbreaks but these were extinguished without any damage being done.

Game, for some reason, was not so plentiful during the past season as previously but along the Kootenay valley, bear, elk, moose, and other game have increased. Hunting was very good outside the boundaries of the park during the hunting season.

YOHO PARK

Motor travel to Yoho national park totalled 7,106 cars carrying 24,140 persons. The season from the park point of view was an ideal one. There was a good deal of wet weather in May and June which enabled the staff to get the roads into first-class condition and obviated the danger of forest fires. The atmosphere throughout the summer was at all times clear and free from smoke, affording excellent opportunities for those who wished to take pictures, as well as giving tourists excellent views of the mountains practically all the time.

During the past few years the improvements in the townsite of Field have been very marked. Little by little undesirable buildings have been torn down and replaced by better ones. The town streets have been planted with new trees and old trees topped and pruned. The road surfaces have been regraded and kept oiled. The main road through the park, known as the Kicking Horse Trail, which forms part of a transmontane highway, is under the supervision of the Highways Engineering Division of the Head Office staff. Accordingly the attention of the park staff was chiefly devoted to the Emerald lake and Yoho extension roads. In the spring a caterpillar tractor was purchased by the department which proved of very great assistance in the road work, being much more efficient and economical than horses.

On the Emerald Lake road a good deal of widening was done, new bridges were constructed and curvatures reduced. On the Yoho road an additional mile was widened.

No serious accidents of any kind occurred on the park roads during the summer. This year through the co-operation of the Royal Canadian Mounted Police a special motor cycle patrol was maintained on the park roads. This greatly assisted in reducing cases of speeding by reckless drivers and no doubt accounted for the absence of accidents.

Early in the year a new tourist camp was established on the Emerald Lake road about one mile west of Field on the Kicking Horse flats. The ground was laid out in lots and two shelters were erected with cooking stoves and sanitary conveniences.

The heaviest traffic to the park was from the east, entries by the Kicking Horse pass showing 4,726 cars and 15,818 persons; of these 3,714 cars were Canadian and 1,012 foreign. Eastbound cars totalled 2,380, carrying 8,322 persons; 2,029 Canadian and 351 foreign.

A new trail which will be of interest to tourists was constructed from Surprise point at the summit of Burgess pass down the northern slope of mount Burgess towards Emerald Lake Chalet. This trail provides a northern route from Field to the Chalet. It also will be useful as a fire trail by making accessible a large area of timber. The trails to the Fossil beds, Burgess pass, Cathedral cut-off, Summit lake, Emerald lake, President glacier, Twin falls, and the Amiskwi were also gone over and put into good shape.

It is noticed that trail riding is on the increase in this park. Between sixty and eighty ponies were kept in the park for livery purposes throughout the season.

One new warden's cabin was erected near Kiwetinok creek and one near Tallon creek.

The growth of the townsite to the east necessitated some protection work being done on the banks of the creek in this district. A mattress of brush and rock was constructed along the river bank for a distance of 620 feet to prevent encroachment of water on the land during flood periods.

Wild life in the park appears to have held its own, so far as numbers are concerned, during the past year. Fifteen moose were reported as having been shot immediately outside park boundaries during the hunting season. Fishing in the lakes and streams of the park was better than ever before and a number of good catches were reported, particularly from Wapta lakes. Twenty thousand rainbow trout fry were distributed in the park waters from the Banff hatchery. Of these 12,000 were placed in Cataract creek and 8,000 in Summit lake.

Fire outbreaks were very few, owing to the favourable season, and the total cost of protection amounted to less than two hundred dollars.

GLACIER NATIONAL PARK

Owing to the fact that the Canadian Pacific Railway hotel at Glacier was again closed, the year was a quiet one in Glacier park so far as tourist travel was concerned. During the summer the company dismantled the old building and removed all furniture and permanent fixtures such as baths, etc. Plans for a new hotel of the bungalow type, it is understood, are now in preparation.

As early as possible in spring the road gang started on repairs to roads. The Station road, Nakimu Caves road and the Rogers Pass road were cleared out and repaired. The Asulkan, Caribou, Flat Creek, Illecillewaet, Mount Hermit, Great Glacier, Beaver River, Grizzly Creek, Bear Creek and Prairie Hills trails were gone over and underbrushed. One new trail was constructed up Mountain creek for a distance of four miles for fire protection purposes. A warden's cabin was constructed in Beaver valley near Grizzly creek, a small frame storehouse at Glacier and a fire equipment house on Flat creek.

At the Nakimu caves exploration work was again carried out. Attention was chiefly devoted to working through to the Number Two entrance via the "Ball Room", with a view to providing another exit from the lower caves and obviating the use of the St. Peter's stairway, which involves a climb of about 120 feet to the upper level. This passage, which was successfully made opens up what is apparently the largest cave yet discovered, immediately inside the Number Two entrance. It has been named "Satan's Palace". Visitors registered at the caves totalled 170.

Game is reported as being on the increase, particularly fur-bearing animals. Bears are plentiful; several which caused annoyance at the Canadian Pacific Railway construction camps had to be destroyed.

No fires occurred in the park during the year.

MOUNT REVELSTOKE PARK

In April work was begun on the lower portions of the Mount Revelstoke highway. The side ditches and culverts were cleared out to be ready for the flooding waters caused by the melting snows and as the snow retreated the road gang worked upward making repairs as they went. In July, under the supervision of head office engineers, work was begun on the extension of the highway. The portion of the new road completed in 1927 was first surfaced and then the extension from Balsam lake to the summit was proceeded with. A small portion of this road which will end with a loop at the summit near the forestry lookout station still remains to be completed next year.

A motor tourist camp was laid out along the shore of Balsam lake, a beautiful spot in the midst of a magnificent wild-flower garden with open views in all directions about three-quarters of a mile from the terminus of the road. A community kitchen was built and other necessary conveniences provided. A warden's patrol cabin was erected at Eva lake. The new boundary line on the west, including the area added to the park in 1927, was cut out and boundary sign notices posted up at various points. An additional two and a half miles was completed on the Clach-Na-Cuddin trail begun last year. This trail will be very useful in case of fire as it gives access to a heavily timbered area. Now that motors can easily reach the top of the mountain there is an increase in travel over the park trails particularly the trail to Eva and Millar lakes. On the ski hill a new stand for the accommodation of press representatives and distinguished guests was erected opposite the judge's stand. This was substantially built, roofed in, and protected from the weather on two sides. Further work was done on the runway at the bottom of the big hill altering the grade and levelling up the surface. The annual ski tournament took place on the 12th and 13th of February and as in former years was well attended and keen interest was shown in the various competitions although no new records were made.

Bear, grouse and partridge are plentiful in the park.

PRINCE ALBERT NATIONAL PARK

Prince Albert national park was officially opened to the public on August 10 and 11. A committee of prominent business men in Prince Albert took charge of the ceremonies and of all arrangements in connection with finances, accommodation, catering and the program of sports.

On Friday, August 10, the Prime Minister and his party arrived in Prince Albert. He was met at the station by the Hon. Charles Stewart, Minister of the Interior, the Hon. T. C. Davis of Prince Albert, several members of Parliament and of the Legislative Assembly. Weather conditions were ideal. The party left immediately for the park which was officially dedicated by the Prime Minister. After the opening had taken place an interesting aquatic sports program was carried out and a cottage presented to the Prime Minister by his constituents. The ceremonies were attended by more than 2,500 people.

Building Areas.—A business subdivision and a residential subdivision at Prospect Point were thrown open for entry during the summer. Eighteen residential lots were filed on and it is expected that several cottages will be erected early in 1929. Many of the inquiries relative to lots have been in connection with that portion of the lake from King island west. Contour surveys were

made of this section and it is expected that lots will be available early next year. In the business area five lots have been filed on, and the firms obtaining these lots intend to build early next year.

Campgrounds.—In addition to the main campground on Waskesiu lake, which is now one of the best in Saskatchewan, small campgrounds were cleared and cleaned up at the ends of each portage.

Tourist Traffic.—Although road conditions were not good and any stay in the park involved camping out, 1,304 cars, containing it is estimated 5,018 people, entered the park during the season. The majority of these visitors camped along the main beach.

Fires.—The spring and early summer months were very dry and there was constant danger of forest fires, a number of which occurred along the southern boundary of the park. The total number of fires during the period from April 1 to December 31 was eight; the cost of combatting them, including warden labour, was $952.15.

Biological Survey.—The possibility of introducing game fish into the lakes and streams of the park was considered. In order that information in regard to the conditions might be obtained, a biological survey was begun and will be continued in 1929.

Roads.—When the park was established the only means of access was an old logging road in very bad condition. Work was immediately undertaken to bring it up into a condition suitable for motor traffic. The construction of a new highway was then started and thirty-two miles of new grade were completed. This new road has been carefully located in regard to both engineering problems and scenic advantages.

Game.—The increase in wild life within the park is already very noticeable, particularly so in the case of moose. These animals are so numerous that it is not unusual to see from eight to twelve in one herd. It is also interesting to note that all wild life is becoming tamer, a happy condition which is particularly noticeable in the case of mule deer. These animals seem to have almost entirely lost their fear of motor cars and people and consequently they are frequently seen by tourists.

Radio Station.—At first one of the great inconveniences was the lack of telephone communication between Prince Albert and the park. This condition has been overcome by the construction of a wireless station at Waskesiu, and another station in Prince Albert for the joint use of the Forest Service and the National Parks Branch.

Buildings.—During the summer, a storehouse and a boathouse were built at Waskesiu lake. In addition three shelters and one service building were constructed in the main camp grounds at the same place. A warden's cabin was built on Crean lake. This provides a stopping-place for the warden patrol which previously was without shelter at this point.

Lectures.—In the early part of April, a lecture tour through Saskatchewan was arranged, illustrated by slides and moving pictures of the Prince Albert park. Fourteen lectures were delivered at the following towns and cities: Melville, Yorkton, Regina, Swift Current, Saskatoon, North Battleford, Melfort, and Prince Albert. Inquiries as to future lectures were numerous.

Animal Parks

BUFFALO PARK

The animals in the park have come through the winter in splendid condition and owing to improved pasture conditions last summer and the nature of

the season, the herd required very little feeding during the winter. The following table shows the animals in the park on March 31:—

Buffalo	4,300
Elk	565
Moose	60
Mule deer	1,824
Antelope	1
Yak	30
Domestic cattle	12
Mixed stock	38
Total	6,830

Farming operations were carried on as usual. Approximately 500 acres were in crop and of this 100 acres were seeded down to grass. About 50 acres of the crop were left for green feed and from the remainder 18,575 bushels were threshed. This yield was sufficient to meet all requirements of this park and allow a surplus of about 10,000 bushels for shipment to other parks. In addition to the above about 350 tons of straw were secured which will make splendid feed for the animals.

Conditions were exceptionally good for putting up hay. There was plenty of moisture in the early part of the season to keep the Ribstone meadow well flooded with the result that there was good growth and, as there was little rain after haying operations began, one of the largest yields in the history of the park was secured. The total cut for the season was approximately 1,500 tons, of which 1,450 tons were procured from the Ribstone meadow.

On June 11 the first shipment of buffalo for the season went forward from Wainwright to the Wood Buffalo park on the Slave river and weekly shipments followed until July 2. This year's consignment totalled 1,088; it was made up of 1,009 yearlings and 79 two-year-olds. So successfully was the work of rounding-up, corralling and loading these animals carried out that only two were lost.

There was also a shipment of two young buffalo, male and female, to the city of Johannesburg, South Africa. These were forwarded from Wainwright in October and were shipped from the port of Montreal. Three buffalo were sent to the Italian Government, and six buffalo, three elk and three mule deer to the Moose Jaw Wild Animal Park.

Fencing.—It was necessary to go over all the main fences as well as cross fences which meant the repairing of approximately 100 miles of fence. In addition to the repair work a total of two miles of new fence was erected to include in the park section 25, township 44, range 7, west of the 4th meridian, which was obtained recently. A number of posts in connection with telephone service were replaced, this work being carried on in conjunction with the fence repair work.

Fire Protection.—Fireguards, both inside and outside the main fence as well as most of the inside guards, were ploughed and with the exception of a few miles along the west boundary, the ploughing was done by park teams. Two new portable fire units were supplied last spring. One was placed at the Home Paddock and the other at the farm.

Roads.—The construction of a new road from Wainwright to the Home Paddock entrance gate was completed in the early part of the season.

Buildings.—A pavilion was erected at Mott Lake picnic grounds. A new fireproof pump-house and a small building for storing ice were also built at the farm. Considerable improvements were made in the way of re-decorating and painting buildings.

Dry wood timber permits were issued to settlers living close to the park for 275 cords, also for 4,500 green willow pickets.

Predatory Animals.—Coyotes were not nearly so numerous in the park as in other years and several of those destroyed were affected with mange. Altogether 32 were shot by the wardens.

Visitors.—There was a noticeable increase again this year in the number of visitors to the park. The actual numbers of those visitors who recorded their names in the registers kept at three of the park gates were as follows:—

Wainwright gate (Home Paddock)	15,310
Hardisty gate	1,933
Farm gate	1,211
Total	18,454

ELK ISLAND PARK

Visitors to Elk Island park totalled 18,968. While most motorists are attracted to the park by the fine herds of animals it contains, the beach and picnic grounds are also a great attraction to local visitors, and they were largely patronized throughout the season. The buffalo herd in this park is in splendid condition and pastured out on the range throughout the whole winter: 230 buffalo were killed, 200 for meat and hides and 30 aged bulls to improve the condition of the herd. Animals in the park at the close of the fiscal year were: 593 buffalo, 400 moose, 453 elk, and 200 deer.

The main fence was gone over and old posts replaced where necessary. A new enclosure near headquarters covering approximately half a section was fenced in. Another enclosure at the south end which was required as a corral during the round-up was also fenced. The existing fireguards were kept in good condition by ploughing and five miles of additional guards constructed along the west boundary.

A very luxuriant growth of grass and pea vine provided good grazing for the animals. About 500 tons of hay were stacked, providing a supply of feed ample for the year's requirements.

The roads in the park were gone over with a grader and kept in as good condition as weather permitted. Reconstruction was begun on the road from the north gate to Sandy beach and four miles were completed before the ground became frozen in the autumn.

Bird life appears to be increasing although prairie chicken seem scarcer than formerly. The blue heron, however, continues to nest in numbers on Crane island and migratory birds showed an increase in numbers. A few partridge were seen in the park during the summer. Fishing was good in Astotin lake and the pickerel and perch placed there in 1927 appear to have done well.

NEMISKAM PARK

Conditions during the early winter at Nemiskam were ideal, with no snow and abundant grazing, and the animals were accordingly in fine condition to withstand the more severe weather which was experienced in January and February. During February it was necessary to feed some hay to the animals. The antelope herd, however, all came through in good condition with the exception of six killed by coyotes. Keeping down these latter animals is one of the most difficult problems connected with the park but it is hoped shortly to devise means of solving it.

Historic Parks and Recreational Areas

FORT ANNE HISTORIC PARK

Visitors to Fort Anne national park, Annapolis Royal, Nova Scotia, numbered approximately 16,000 in the past year. Of these 11,390 registered and were shown through the museum, an increase of 1,603 over the previous year.

An attractive bridge over the moat was completed early in April.

On June 11 the Historical Association of Annapolis Royal formally unveiled and presented to the museum of Fort Anne park a portrait in oils of Jean Paul Mascarene, the officer, then a captain, who mounted the first British guard in this fort when the place was taken by the British in 1710. Mascarene remained at Fort Anne for forty years and played a very important part in its history.

The foundation of the Vetch memorial was laid on July 25 and completed August 1. The formal unveiling took place September 22 and was performed by Mrs. Robert Weeks Kelly of New York, a direct descendant of Samuel Vetch. Mrs. Kelly has since presented to the park museum the original commission appointing her distinguished ancestor Adjutant-General of the force which captured this place in 1710. A portion of the writing is illegible, but the Queen's signature "Anne R" is as distinct as on the day it was written. Other acquisitions to the museum during the year included some valuable and interesting pictures, documents, and books, and some additional specimens of local birds.

POINT PELEE PARK

Visitors to Point Pelee park last year totalled approximately 50,000, practically all of whom came by motor. While no register is kept at the park, the warden estimates that the number of cars entering from April 1 to December 31 was approximately 12,525. The number of campers who took out permits for less than a four days' stay was 275. Of these 75 came from Ontario and 200 from the United States. Camping permits for more than four days numbered 44; 22 from Ontario and 22 from United States. In view of the large patronage which this park receives from United States visitors it is expected that the completion of the tunnel at present under construction from Windsor to Detroit will greatly increase travel to the park. During the year underbrushing was widely undertaken which greatly improved the appearance of the groves, and early in the spring 950 young trees of willow and hackberry were set out. Six hundred of these were planted along the east beach where they will protect the shore line as well as improve the general appearance of the park. Thousands of migratory birds visited the park during the spring and fall migrations and wild geese were noted to be particularly abundant in the autumn. Permits to the number of 259 to shoot wild duck during the open season from October 1 to December 1 were issued. This is a smaller number than in the previous year. Squirrels are somewhat fewer in numbers in the park. Golden pheasant, however, are as plentiful as ever. The racoon are increasing, and quail appear in larger numbers each year. These increases show that the park is fulfilling the purpose for which it was created, in so far as the conservation of wild life is concerned.

VIDALS POINT RECREATIONAL AREA

The number of people to Vidals Point is steadily increasing. During July and August last year it is estimated that approximately 15,000 persons visited the reserve, the heaviest week being from July 21 to 28 when about 3,000 visitors entered the area. The beach was kept in good condition throughout the season and all camps and camp sites inspected and kept free from litter. Buoys, danger signals, and a diving platform were placed in position for the convenience of swimmers and a new well was sunk for campers' use. There was good fishing on lake Katepwa.

Protection of Migratory Birds

ENFORCEMENT OF THE MIGRATORY BIRDS CONVENTION ACT

In July, 1928, amendments were made to the regulations based on the Migratory Birds Convention Act, following suggestions from the different provincial game officers and the chief federal migratory bird officers. These included:—

For all Canada: A closed season on wood duck for a period of three years. In order to clarify the conditions with respect to the transportation and shipment of protected birds, the section pertaining to this matter has been revised. Following a resolution of the Provincial-Dominion Game Conference a provision was made in the regulations which will enable agriculturists to secure relief more rapidly when certain birds are found seriously damaging their crops. Several minor changes were made as well, and a consolidation of the Migratory Birds Convention Act and of regulations containing these amendments was printed and distributed prior to the opening of the hunting season.

For the province of British Columbia: The opening of the season on band-tailed pigeons, a revision of the districts, making general the prohibition of the use of the rifle in hunting migratory game birds, a change in the season for black brant, and a restriction respecting the time at which migratory game birds may be shot on the first day of the open season.

For Alberta: The dividing of the province into two zones, the season in the northern zone being two weeks earlier than formerly.

For Ontario: The dividing of the province into two zones, the season in the southern zone being two weeks later than formerly.

For Nova Scotia: A change in the open season for ducks and rails in Cape Breton island, and a special provision respecting the excavating of duck shooting blinds and sinking of casks or boxes in the tidal flats of Goose bay, Little River harbour, and at the mouth of Lobster bay.

The staff enforcing the Migratory Birds Convention Act continues at the same strength as last year, and complete co-operation with provincial game departments has been enjoyed. The enforcement of bird protection measures has been left largely in the hands of the provincial authorities in accordance with the original plan, and thus duplication is avoided.

In addition to the provincial officers who are enforcing the law, some hundreds of honorary game officers co-operate in this connection, and furnish this office with valuable information respecting bird conditions in their localities. Honorary officers are kept informed through a system of circular letters. The officers of the Royal Canadian Mounted Police have helped materially by enforcing the law and by conducting bird observations in various districts. Dominion fishery officers lend valuable assistance.

A staff of officers is maintained in the Maritime Provinces for enforcement of the migratory bird law. The Chief Federal Migratory Bird Officer for the provinces of Ontario and Quebec, protected, with the aid of a staff of temporary assistants and the bird sanctuary caretakers, the abundant sea-bird life on the north shore of the gulf of St. Lawrence in Quebec. The Chief Federal Migratory Bird Officer for the Western Provinces, while devoting much time to co-operative measures with the provincial game departments has been occupied as well in supervising the sanctuaries and public shooting grounds in these provinces and in making patrols.

Seventy-two prosecutions were instituted by Dominion officers in connection with the enforcement of the Migratory Birds Convention Act. These resulted in sixty-eight convictions. Fines imposed amounted to $757. Prosecutions instituted by provincial officers are not included in this summary.

The department has worked in conjunction with the Department of Marine and Fisheries in seeking ways and means for preventing loss of bird life caused by oil dumped from vessels in navigable waters, or reaching navigable waters in other ways. Following a conference at Washington, in which Canada took part, a Draft Convention on oil pollution of the high seas was prepared, and an Order in Council has been passed authorizing the Hon. Vincent Massey, Envoy Extraordinary and Minister Plenipotentiary at Washington, to sign it on behalf of Canada.

This branch has undertaken a waterfowl census in conjunction with the Biological Survey at Washington. The purpose of this investigation is to determine, as nearly as possible, the abundance from year to year, distribution, and migration of the different species of ducks, geese, swans, and coots that inhabit North America. By having as many observers as possible throughout the United States and Canada making comparative counts, each on one area, month after month, it is hoped that it will be possible to tell approximately whether waterfowl are abundant or scarce in any locality after two or three years' records are available.

Permits and Licences.—Permits and licences were issued as follows (calendar year):—

Collection of birds for scientific purposes	263
Possession of birds for propagating purposes	481
Capture of birds for propagating purposes	36
Destruction of certain birds when found to be seriously damaging agricultural or fishery interests	72
Collection of eider-down	4
Special permits	12
Taking of birds for banding purposes	113
Practising taxidermy	76
Shooting of geese and brant in Shelburne and Queens counties, Nova Scotia, in the open season provided by law	472

Bird Banding.—Through bird banding, much valuable information is being secured concerning Canada's birds. The branch is co-operating with the United States Biological Survey in tracing and recording migrations of birds by the banding method, nearly all the field work being done by voluntary co-operators. The official records of bird-banding returns which concern Canada are kept in this branch. From January 1, 1928, to December 31, 1928, 10,557 records of birds banded by Canadian co-operators and 2,524 repeats and returns on banded birds were received. In addition to this, one of our most active operators has banded 3,600 birds during the year 1928, and secured during that year many returns of the birds which he had previously banded.

Bird Sanctuaries.—Recommendations have been made that sanctuaries be set aside for birds in goose concentration points in southern James bay, as it is expected that a large influx of hunters will go into that district by the new railway. This has been referred to the game administration officers of Ontario and Quebec. The shooting of wild ducks and wild geese on Many Island Lake and Lac La Biche bird sanctuaries, has been allowed during the regular open season.

The United States Congress has recently enacted legislation (the Norbeck-Andresen Act) under the Migratory Birds Treaty which provides for the appropriation of approximately eight million dollars for the purpose of purchasing and maintaining waterfowl refuges in the United States. These refuges will be of great value to waterfowl, and the bird life in Canada will consequently benefit.

Public Shooting Grounds.—Fifty-one public shooting grounds, consisting of marshy areas, have been reserved: thirty-two in Alberta; twelve in Saskatchewan; and seven in Manitoba. These continue to afford free shooting in season to the public. The game protection authorities of British Columbia have recommended the reservation of Pitt lake as a public shooting ground, and steps have been taken to comply with this recommendation. Suitable arrangements have been made with the Department of Marine and Fisheries in connection with the establishment of a pickerel hatchery on land included in Marshy Point public shooting grounds, Manitoba.

EDUCATIONAL

Various camps attended by young people were visited and instruction given in bird protection and natural history subjects.

The total distribution of pamphlets amounted to 35,133. Publicity concerning the shooting season and other bird protection matters was obtained through the distribution of 40,073 posters, 9,011 copies of the Migratory Birds Convention Act, and 15,850 abstracts of the regulations under it. Circular letters regarding the changes in the regulations for the season 1928 were distributed to the press throughout Canada. Circular letters were also distributed to all cold storage warehouses in Canada advising them that legally killed migratory birds could only be kept in storage for a certain period after the close of the open season.

The Chief Migratory Bird Officer for the Western Provinces after a conference with the Director of Education for British Columbia prepared a paper entitled "Teachers Guide to Bird Study in British Columbia", which is to be circulated through the schools. Numerous lectures on bird protection were given by members of the permanent staff in both Western and Eastern Canada. The latter series included a special tour of New Brunswick, Nova Scotia and Prince Edward Island, during which much public interest in bird protection was aroused.

The lantern slide library contains slides covering 981 subjects, and showing 340 different species of birds. The demand for these was greater than ever before and in all, 3,769 slides were sent out, free of charge.

Several items of interest to explorers and others in the Far North were prepared for broadcasting by this office and several talks on bird protection were given over the radio.

Special measures were continued to protect trumpeter swans in British Columbia. Christmas bird censuses were made at many points by members of the various naturalists' clubs and officers of this branch. At Ottawa 19 species were found. Bird censuses taken from year to year give a comparative idea of the distribution of bird life at a time when it is at its lowest ebb. Some specimens of swans and other birds found dead at Kingsville, Ontario, were transferred to the Health of Animals Branch, Department of Agriculture, Ottawa, for post-mortem examination. The results showed that a few of these birds had died from an intestinal infestation with a liver fluke. Satisfactory progress has been made in the study of the food of marine birds with special relation to the spawning of herring.

Much interest has been shown in the building of bird houses, and bird-house competitions have been held under various auspices throughout Canada.

Advisory Board on Wild Life Protection.—During the year the Board held five meetings and many important items were discussed. Mr. J. B. Harkin was appointed Chairman of the Board, and four new members were added, viz., W. W. Cory, C.M.G., Deputy Minister of the Interior; Mr. Hoyes Lloyd, Supervisor of Wild Life Protection; Mr. T. R. L. MacInnes, of the Department of Indian Affairs; and Mr P. A. Taverner, Ornithologist of the National Museum of Canada.

Dominion and Provincial Game Protective Associations.—A development, which will undoubtedly prove of value in conserving the wild life of Canada, is the activity which has occurred recently in the organization of provincial game protective associations and in the discussion of the formation of a Dominion association.

Historic Sites and Monuments

Good progress was made during the year in connection with the acquisition, preservation and marking of historic sites of national importance, and the commemoration of the public services of outstanding personages in Canadian history.

As in former years the executive work was carried out by the National Parks of Canada Branch in accordance with the recommendations and advice of the Historic Sites and Monuments Board of Canada. This Board, which is

an honorary body comprised of recognized authorities on Canadian history, held its regular meeting in Ottawa in May. The present personnel of the Board is as follows: Chairman, Brig.-General E. A. Cruikshank, LL.D., F.R.S.C., F.R. Hist. S., Ottawa, Ont.; His Honour F. W. Howay, LL.B., F.R.S.C., New Westminster, B.C.; James H. Coyne, M.A., LL.D., F.R.S.C., St. Thomas, Ont.; J. Clarence Webster, M.D., D.Sc., LL.D., F.R.S.C., Shediac, N.B.; His Honour W. Crowe, LL.B., K.C., Sydney, N.S.; Hon. P. Demers, LLD., Montreal, P.Q.; Mr. J. B. Harkin, Commissioner, National Parks of Canada, Ottawa, Ont.; Secretary, Major A. A. Pinard, National Parks of Canada, Ottawa, Ont.

Since the inception of this work in 1919, the Board has reviewed the status of over 800 sites. From among these 221 have been selected to date as worthy of national commemoration. Control of 154 of these has been acquired by the National Parks Branch, and 129 memorials have already been erected. The interest and co-operation of provincial and local historical organizations in carrying out this work has in many instances been of great assistance and is gratefully acknowledged. The increase in the number of inquiries received with regard to these sites, as well as in the number of visitors to the sites themselves, point to a gratifying growth of interest on the part of the general public.

SITES MARKED

The following sites were commemorated during 1928:—

Canso, Nova Scotia.—A cairn with tablet was erected on a site provided by the town in the public school grounds to commemorate the events associated with the early history of Canso, which was developed as an important fishing station by the French in the 16th century. The British fortified it in 1720 and it was later the scene of several combats between them and the French and Indians.

First Post Office in British North America, Halifax, Nova Scotia.—With the consent of the Department of Public Works, a bronze tablet was affixed to the outer wall at the right hand entrance to the Post Office building, at Halifax, to record the fact that the first post office in the Dominion of Canada as now constituted was established in that city, in 1755.

King's College, Windsor, N.S.—With the consent of the University authorities, a tablet was attached to the outer wall of the Hensley Memorial Chapter building on the King's College University grounds at Windsor, to commemorate the founding of that college, in 1789, by the Right Reverend Charles Inglis, D.D., first bishop of Nova Scotia, and other United Empire Loyalists. The college was granted a Royal Charter in 1802, and is the oldest university in the King's overseas dominions.

Samuel Vetch, Annapolis Royal, Nova Scotia.—A cut-stone memorial, to which is affixed a tablet, was erected in the Fort Anne park, Annapolis Royal, to commemorate the public services of Samuel Vetch, Adjutant-General of the force which captured Port Royal, capital of Acadia, in 1710. Vetch was the first Governor and Commander-in-Chief of Acadia and continued in this position until after the Peace of Utrecht in 1713.

First Steam Fog Horn, St. John, New Brunswick.—With the consent of the Department of Public Works a bronze tablet was affixed to the outer wall of the Customs building in St. John, to commemorate the invention and construction by Robert Foulis, in 1854 of the first steam fog alarm in the world.

First Marine Compound Engine, St. John, New Brunswick.—By permission of the Public Works Department, a tablet was affixed to the outer wall, at the entrance to the Customs building in St. John, to commemorate the invention of the first marine compound steam engine. This was designed by Benjamin Tibbits, a native of Queens county, New Brunswick, and installed in 1842

on the steamer *Reindeer* for service on the Saint John river. The engine was in use for more than fifty years.

Ile-aux-Coudres, Province of Quebec.—A white granite cross, with a tablet affixed thereto, was erected on a plot of land donated by Messrs. Elie and Joseph Dufour, on Ile-aux-Coudres, in the St. Lawrence river opposite Baie St. Paul, to mark the site where Jacques Cartier landed on September 6, 1535. Cartier erected a cross, explored the island and gave it its name. He departed the following day after hearing mass.

First Steamship in Canada, Montreal, Province of Quebec.—With the approval of the Molson Brewery Company a tablet was placed on the outer wall of their main office building on Notre Dame street east, to commemorate the construction of the first Canadian steamship, the *Accommodation,* which was built in Montreal, in 1809, by the Honourable John Molson During the war of 1812-14, the ship rendered notable service on the St. Lawrence river between Montreal and Quebec.

Battle of Two Mountains, near Senneville, Province of Quebec.—A cairn with tablet was erected on a small plot of land, donated by Mr. and Mrs. Waldo W. Skinner, adjacent to the Gouin boulevard near Senneville, to commemorate the events associated with the engagement which took place in 1689, on the lake of Two Mountains, when a band of Iroquois was defeated by the French, thus saving the island of Montreal.

Battle of Chateauguay Ford, near Allan's Corners, Province of Quebec.—A cairn with tablet was erected on a small plot of land, donated by Mr. James Kerr, adjacent to the de Salaberry highway, between Allan's Corners and Howick, to commemorate the events associated with the engagement which took place there on October 26, 1813, between troops, detailed for the defence of the ford, and an invading United States force, much superior in numbers. The defeat of the latter was an important factor in saving the island of Montreal.

Dr. John Strachan, Cornwall, Ontario.—By permission of the Board a tablet was affixed to the outer wall of the Cornwall Collegiate Institute building to commemorate the distinguished public services of the Honourable and Right Reverend John Strachan, first Anglican bishop in Upper Canada, 1778-1867, a patriotic citizen, pioneer educator, author, and legislator. The famous Strachan grammar school was opened in Cornwall in 1802 on the site of the present Institute.

Montgomery's Tavern, Toronto, Ontario.—A tablet was placed on the outer wall of Postal Station "K," North Yonge street, Toronto, with the consent of the Department of Public Works, to mark the site of Montgomery's Tavern, rendezvous of the leaders in the rebellion in Upper Canada in 1837. On December 7 a brief skirmish took place here resulting in the defeat of the insurgents by the loyal militia. The uprising was an important factor in bringing about the union of Upper and Lower Canada, in 1841, and the permanent establishment of responsible government in Canada.

Battle of York, Toronto, Ontario.—A tablet was affixed to a pedestal at the entrance to the Province of Ontario building in the Exhibition park, Toronto, to commemorate the events associated with the engagement which took place on April 27, 1813, between the Canadian Militia and invading United States troops near the spot.

Navy Island Shipyard, near Chippawa, Ont.—A tablet was placed on a pedestal erected by the Queen Victoria Niagara Falls Park Commission, adjacent to the park boulevard near Chippawa, to indicate the site of Navy Island shipyard where the first ships of war which navigated the upper lakes under the British flag were built in 1763-64.

Vrooman's Battery, near Queenston, Ont.—A tablet was placed on a pedestal erected by the Queen Victoria Niagara Falls Park Commission, adjacent to the park boulevard near Queenston, to mark the site of the battery engaged in the battle of Queenston Heights, 13th October, 1812, between Canadian and United States troops.

Fugitive Slave Movement, Windsor, Ont.—A tablet was affixed to a pillar of the Dominion Bank building on Ouellette avenue, to commemorate the events associated with the fugitive slave movement to Canada. Before the United States Civil War of 1861-65, Windsor was an important terminal of the "underground railroad." Escaping from bondage thousands of slaves from the south, landing there, found in Canada, friends, freedom, and protection.

Fort St. Joseph, St. Joseph's Island, near Sault Ste. Marie, Ont.—A tablet was attached to the chimney, all that now remains of Fort St. Joseph, the most westerly military post in Upper Canada, built in 1796-99 and garrisoned until 1812. The fort was a noted trading post and resort for the Indians, and from there was launched the attack in 1812 which resulted in the capture of Fort Mackinac by the British.

Indian Treaty No. 1, Lower Fort Garry, Manitoba.—By permission of the Hudson's Bay Company, a tablet was affixed to the outer stone wall of Lower Fort Garry, near the south gateway, to commemorate the events associated with the signing of Indian Treaty Number 1, on August 3, 1871, between the Crown and the Swampy Cree and Chippawa Indians, whereby those tribes surrendered all their possessory rights to the lands comprised within the then existing boundaries of Manitoba.

Fort La Reine, Portage la Prairie, Manitoba.—With the consent of the civic authorities a cairn with two tablets was erected near the city pumping station to mark the site of the fort built by la Verendrye, the French-Canadian explorer and discoverer, in 1738. This post became his headquarters and from it he, or his sons, carried on explorations northward to the Saskatchewan river, southwest to the Mandan country, and to the foot-hills of the Rocky mountains.

First Coal Mine in Alberta, Lethbridge, Alberta.—A cairn with tablet was erected in Galt gardens, with the approval of the civic authorities, to commemorate the events associated with the first discovery of coal in the province of Alberta. The mine was opened on the west bank of the Oldman river by Nicholas Sheran, in 1872. He broke his own trails, found his own markets and hauled coal by ox-team to Fort Benton, Montana, U.S.A., and other distant points. This vital industry has contributed greatly to the development of Western Canada.

Barkerville, British Columbia.—A cairn with tablet was erected on the side of the Provincial highway, just outside the town, to mark one terminus of the Yale-Cariboo wagon road, completed in 1865. Barkerville was the centre of the old Cariboo region whose gold fields, discovered in 1861, added many millions to the wealth of the world.

Sir George Simpson, Kootenay National Park, British Columbia.—A cairn with tablet was erected on the Banff-Windermere highway at the junction of the Simpson and Vermilion rivers, fifty miles west of Banff, to commemorate the public services of Sir George Simpson, Governor of the Hudson's Bay Company, 1821-1860, under whose guidance the country was explored, peace with the natives was maintained, trade developed, and British rule strengthened. He, during his journey round the world in 1841-42, was the first white man to cross the Rocky mountains, through this divide which has ever since been known as the Simpson pass.

PRESERVATION WORK

Preservation and other work was carried out at several of the larger sites as follows:—

Fort Cumberland (Beauséjour), New Brunswick.—The entire property was fenced, a new entrance, parking area and rest pavilion provided, footpaths laid out. A number of markers were placed designating points of interest, and the lines occupied by Monckton's attacking army, 1755, were cleared of bushes.

Fort Chambly, Chambly, Province of Quebec.—The stonework of the outer walls of the fort was thoroughly repaired and capped with a cement coping; a protection wall placed around the bastions facing the river, repairs made to the observation tower on the west wall and a monument erected in the old cemetery.

Fort Lennox, Ile-aux-Noix, Province of Quebec.—Stone arches of the arcade of the guard-house, which had fallen out of line, were restored. The upper walls were strengthened. The outside walls and the piers supporting the arches were thoroughly grouted and repointed. Repairs were also made to the roof, chimneys, and ceilings of the barracks, as well as to the masonry at the north and south main entrances.

Fort Wellington, Prescott, Ontario.—Extensive improvements were made to the caretaker's quarters and museum and the work of repairing the inner palisades was practically completed. A water supply system was also installed.

Martello Shoal Tower, Kingston, Ontario.—The wooden roof was removed from the tower so as to make it conform to its original design. Repairs were carried out on the masonry work and also to the small landing wharf and entrance.

ACQUISITION OF SITES

Control of the following sites, recommended by the Board for future marking, was also obtained:—

Louisbourg, Cape Breton.—The major portion of the lands included in the original site were purchased from the owners.

Fort La Have, La Have, N.S.—The Department of Marine and Fisheries granted permission to erect a memorial on the lighthouse reserve at La Have to mark the site of the fort built by de Razilly in 1632.

Fort Jemseg, Lower Jemseg, N.B.—Mr. F. C. Nevers of Lower Jemseg donated a plot of land adjacent to the public highway, on which to erect a memorial to mark the site of Fort Jemseg, built in 1659, during the British possession of Acadia.

First Railway in Canada, St. Johns, Quebec.—Permission was obtained from the Canadian National Railways to place a tablet on the outer wall of their station at St. Johns to mark one terminal of the first railroad in Canada.

Battle of 6th September, 1775, near St. Johns, Quebec.—The St. Johns Golf Club donated a plot of land adjacent to the Lacolle highway, on which to erect a memorial to commemorate the events associated with the engagement which took place on above date.

Chaudiere Portage, Hull, Quebec.—Permission was obtained from the Hull civic authorities for the erection of a memorial in the centre of Montcalm street, near the Ottawa river, to mark the site of the first portage around the Chaudiere falls.

Bishop Alexander Macdonell, St. Raphael, Ontario.—Permission was obtained from the Roman Catholic Episcopal Corporation of the Diocese of Alexandria to place a memorial on a small plot of land in front of the parish church at St. Raphael West to commemorate the distinguished public services of Bishop Alexander Macdonell.

Battle of the Longwoods near Wardsville, Ontario.—Mr. Roy Henderson donated a plot of ground, immediately adjacent to the London-Chatham highway on which to erect a memorial to commemorate the events associated with the engagement which took place there on March 4, 1814, between Canadian and United States troops.

Wawanesa, Manitoba.—Permission was obtained from the municipal authorities to place a memorial in one of the parks to commemorate the historic events associated with the early fur-trading posts which existed near the confluence of the Souris and Assiniboine rivers.

Indian Treaty No. 6, Fort Carlton, Saskatchewan.—Mr. W. P. Urton donated a plot of land adjacent to the main road leading from Prince Albert to Carlton Station on which to erect a memorial to commemorate the events associated with the signing of Indian Treaty No. 6, in August, 1876.

Point Grey, Vancouver, B.C.—Permission was obtained from the Provincial Government to place a memorial in the grounds of the University of British Columbia, to commemorate the events associated with the meeting of Captain George Vancouver and the Spanish explorers in June, 1792.

Pacific Cable, Bamfield, B.C.—Permission was obtained from the Pacific Cable Board to place a tablet on the Cable building at Bamfield to mark one terminal of the Pacific Cable which was completed in 1902.

APPENDIX

Report of the Secretary of the Alpine Club of Canada, Horse Thief Creek, 1928

The twenty-third annual camp of the Alpine Club of Canada was held in the valley of Horsethief creek, a tributary of the Columbia, just below the Lake of the Hanging Glaciers, from July 17 to 31, 1928. While camp has been placed on more beautiful sites the neighbourhood was very interesting and unknown to almost every one. A subsidiary camp was pitched on the south fork of the creek which was an excellent base for climbing, though not suitable for a large camp.

The journey from rail was a somewhat lengthy one. Members drove from the club house at Banff by way of the Banff-Windermere road to a base camp pitched at the end of the driving road on Horsethief creek. There the night was spent and the next day the journey made into the main camp. A halfway camp was used by some members who found the walk over long.

It was the first camp in the history of the club which did not experience a single storm. The camp fires were interesting and were addressed by representatives from Japan, New Zealand, New South Wales, and Scotland.

After the members had dispersed the camp was occupied by the Trail Riders of the Canadian Rockies who appreciated the methods of the club.

The camp was well attended and every one seemed happy. One hundred and sixty-eight were placed under canvas: among them representatives of the Alpine Club, England; the Japanese, American, French, Swiss and German-Austrian Alpine clubs; The Scottish Mountaineering Club; The British Columbia Mountaineering Club; The Appalachian Mountain Club; The Mountaineers; and The Royal Geographical Society.

The principal mountains climbed were: Thompson, The Dome, Monica, Bruce, Maye, Camp peak, Dorothy, Commander and Farnham.

Those present were drawn from the following countries: Canada, England, Scotland, Australia, New Zealand, Japan, and the United States.

Report of the Secretary of the Alpine Club of Canada, Banff Club House, 1928

The Alpine Club House at Banff had the most successful season in its history. The attendance was considerably augmented by members visiting the camp at Horsethief creek and making Banff their point of departure.

New cabins were built to replace the tent houses which had outlived their attractiveness. These cabins are exceedingly comfortable and also ornamental, harmonizing with the surroundings. The parking space was also enlarged and a sanitary building erected.

The club house remains a centre of information for all those interested in mountain matters. The usual climbs of the surrounding peaks were made, including two of mount Louis, the first time it had been climbed by ladies.

The outstanding mountaineering event of the season was the ascent of mount Waddington (Mystery mountain) in the coast range by Mr. and Mrs. Munday.

The attendance was 501, drawn from England, Scotland, Australia, New Zealand, the United States, Denmark, Italy, and Japan.

V

WATER POWER AND RECLAMATION

REPORT OF THE DIRECTOR AND CHIEF ENGINEER OF WATER POWER, J. T. JOHNSTON

Introductory

The organization of this service remains the same as for previous years and the reader is referred in this connection to the Annual Report of the Department of the Interior for the fiscal year ended March 31, 1926.

International Waterway Matters

During the year the International Waterway problems received continuous attention and appropriate action was taken from time to time in connection with the various matters arising.

Following the submission on December 14, 1927, of the Interim Report of the Special International Niagara Board, appointed by the Governments of Canada and the United States for the investigation into the preservation of the scenic beauty of Niagara falls and an analysis of all factors relative thereto, inclusive of what amounts of water might be permitted to be diverted for power purposes, the board continued its investigatory work at the falls. The interim report recommended the early construction of certain initial remedial works designed to rewater the bared flanks of the Horseshoe falls and to restore and preserve the scenic values of the spectacle as a whole.

Based upon this report a Convention and Protocol was signed between Canada and the United States on January 2, 1929, providing for the construction of remedial works and permitting the concurrent experimental withdrawal of water from the Niagara river, additional to the amount specified in the Boundary Waters Treaty of 1909, to the extent of 10,000 cubic feet per second on each side of the river—these additional diversions to be allowed only during the winter or non-tourist season—and the provision for this diversion to terminate seven years from the date of the initial additional diversion authorized.

The objective of the Convention is to demonstrate the effectiveness of remedial works to preserve and enhance the scenic values of the falls and to determine experimentally whether additional withdrawals of water could be permitted without impairment of these scenic values.

The Protocol provides for the construction of the remedial works under stringent conditions of governmental supervision and control, by the Hydro-Electric Power Commission of Ontario and the Niagara Falls Power Company of Niagara Falls, New York. The Convention is now before the legislative bodies of the two countries for ratification.

The suit of the complainant states of Wisconsin, Minnesota, Pennsylvania, and Ohio *v.* the Chicago Sanitary District, before the United States Supreme Court in reference to the diversion of water from the Great Lakes System through the Mississippi watershed has been closely followed in view of its importance to Canadian interests.

Following the submission of Special Master Charles E. Hughes' report to the United States Supreme Court made on November 23, 1927, time was allowed by the court for the filing of exceptions to the Special Master's findings, and following the filing of these, final oral arguments were presented to the Supreme

Court on April 23, 1928, and the decision of the court was finally released on January 14, 1929. The court ruled that it was its duty by an appropriate decree to compel the reduction of the diversion to a point where it rests on a legal basis, and thus to restore the navigable capacity of lake Michigan to its proper point. The decision also provided that the Special Master make a further examination into the situation to determine the practical measures needed to give effect to the court's finding and to determine the period required for their completion. The Special Master is authorized to hear witnesses and, with all convenient speed, to make a report of his conclusions, and of a form of decree.

In accordance with these provisions, the Special Master held a hearing in Chicago on March 25 to 29, 1929, at which representations were made by the Sanitary District and by the complainant States as to the measures which might be taken to reduce the diversion and as to the time involved. A further hearing in this connection is set for April 15, at Washington.

The Lake of the Woods Convention between Canada and the United States executed on February 24, 1925, embodied a number of provisions which require departmental action. The Convention provides for the securing of a flowage easement up to elevation 1064 on the United States shore of lake of the Woods and accords to Canada the privilege of representation by counsel should the costs be determined by means of the usual judicial procedure in the United States. In accordance with this provision, Canada has been represented by counsel in the proceedings relative to the appointment of appraisers for the evaluation of the lands, in August and September, 1928, and in the subsequent hearings relative to the instructions given to the appraisers at hearings held early in December, 1928, and in February and March, 1929. The appraisers are at the present time engaged in evaluating the first group of claims.

The Lake of the Woods Convention also provided for a reference to the International Joint Commission of the question of storage in Rainy lake and in the boundary waters above and of the development of power in connection therewith. Intensive field and office investigatory work has been carried out in connection with this reference and an interim report has been prepared incorporating the basic data upon which the problem can be properly studied and is now in the hands of the King's Printer.

The hearing arranged for by the International Joint Commission on the application of the St. Lawrence River Power Company for permission to raise the crest of the company's existing submerged weir in the South Sault channel of the St. Lawrence river near Massena, New York, was held on April 3, 1928, in Washington. The Dominion Government requested that the final hearing of the application be postponed until the middle of June, in order that further study might be given to the situation. The Commission directed that the hearing stand adjourned *sine die*, the applicants to have the right to present their application for hearing, such hearing to be held upon due notice to all parties interested at such later date as might be fixed by the Commission. No further action has developed to date.

Following the hearing held by the International Joint Commission on November 29, 1927, at Nelson, B.C., in respect to the application of the Creston Reclamation Company for approval of its project for the reclamation by dyking of 8,600 acres of land in Kootenay flats on the Kootenay river, the Commission withheld approval in order to permit of further investigations being made. Following these investigations the Commission, on April 3, 1928, issued an order approving the plans and specifications, subject to certain specified conditions. No active construction work has been undertaken to date.

The Roseau River situation has constituted an international problem for some years past. Following several exchanges of views between the two governments, it was agreed that the entire question should be referred to the International Joint Commission for investigation and report. Accredited repre-

sentatives of the two governments accordingly met at Winnipeg on July 10, 1928, and drew up Terms of Reference which, in due course, were referred to the International Joint Commission by the two governments. A hearing has been arranged to take place before the commission at Roseau, Minnesota, on June 6 next. In the meantime, an intensive field and office study is under way looking to the collection and presentation of the technical data bearing upon the problem, which must form the basis of the final decision of the Commission. In this investigatory work the department is having the close co-operation of the Department of Public Works.

Other problems have been active along the International Boundary throughout the year, such as those arising in connection with Lake Memphremagog storage, and the Columbia River reclamation project in the United States and its effect upon the Pend d'Oreille river in British Columbia. Consideration is being given to the establishment of international gauging stations on the rivers crossing the International Boundary from lake of the Woods to the Pacific coast. Systematic attention has been given to all situations which have arisen and on which action has been required.

The various International Waterway Boards have functioned as usual throughout the year.

In accordance with the order issued on October 4, 1921, by the International Joint Commission in conformity with the provisions of the Boundary Waters Treaty of 1909, the measurement and apportionment of the stream flow in the St. Mary and Milk rivers and their tributaries in the provinces of Alberta and Saskatchewan and in the state of Montana, were continued throughout the past year by an engineer of this service in co-operation with an engineer of the United States Reclamation Service. The report covering the year's operations has been prepared and submitted to the Commission for review upon the occasion of its regular semi-annual meeting in April.

The Lake of the Woods Convention provided for two boards for the control of the lake levels and the outflow therefrom—the Canadian Board and the International Board. The Canadian Lake of the Woods Control Board has continued its regulation of lake of the Woods between elevations 1056 and 1061 sea-level datum, as elsewhere recorded in this report. The International Lake of the Woods Control Board is called upon to exercise its responsibilities whenever the lake rises above elevation 1061 or falls below elevation 1056. On June 18 last, owing to heavy precipitation throughout the watershed, the lake level rose above elevation 1061 and the International Board automatically assumed control. The lake continued to rise, reaching a maximum of 1061·31 on July 13, returning to elevation 1061 on August 4 and reverting to the control of the Canadian Board. On September 15 the lake level again rose to elevation 1061, rising to 1061·23 by October 15, and remaining under the control of the International Board until November 9, when the level again fell below elevation 1061.

Under the Convention the International Board is also charged with the responsibility of approving certain protective undertakings to be constructed on the United States shore of the lake. On May 8, 1928, the board approved the protective works planned for the town of Warroad. Other lesser works have also received the board's approval.

The International Lake Superior Board of Control continued to exercise its responsibilities with respect to the regulation of lake Superior throughout the year. Records of discharge through the rapids, navigation canals and power plants on both sides of the river were systematically reported to the board. The work of recalibrating the sluices of the control dam and of the other outlets was continued. The improvement in lake levels arising from the increased precipitation through the Great Lakes watershed, continued in 1928 and by the month of August lake Superior had risen to elevation 603·0 sea-level datum. The lake elevation was at 602·55 on March 31, 1929, and the mean discharge

for the fiscal year was 74,000 c.f.s., or about 10,000 c.f.s. greater than the mean for the fiscal year ended March 31, 1928.

The International Niagara Board of Control has continued its close regulation of the diversions from the Niagara river for power purposes as permitted by Article 5 of the Boundary Waters Treaty. Continuous records of the withdrawal of water by all power stations on both sides of the river are obtained by the board and the control exercised is such as to ensure that the limits of the diversion set forth in the treaty are not exceeded.

The International Massena Board of Control continued to exercise its supervision over the conditions obtaining with respect to the submerged weir in the South Sault channel of the St. Lawrence river and the regulation of flow through the Massena canal, in accordance with the order of the International Joint Commission dated December 6, 1922. The board was in receipt of monthly reports showing the amount of water diverted and the power house performance from day to day. No abnormal conditions developed during the year. The mean daily diversion exceeded 25,000 c.f.s. on four days. The elevations of the river at Lock 21 were improved by the operation of the submerged weir, the increased height of the water surface above the natural conditions varying from 0·30 to 0·83 feet, thus improving navigation conditions.

The International St. Croix River Board of Control continued to exercise its supervision over discharge of the St. Croix river past Grand Falls dam, in accordance with the orders of the International Joint Commission dated November 9, 1915, and October 3, 1923. The board was in receipt of regular reports of the discharge of the river and of the water elevations above and below the Grand Falls dam. No abnormal conditions developed during the year. General satisfaction with the regulation was expressed by the officers in charge of the power stations below the dam, while the supply of water for fishway operation was at all times satisfactory.

Water Power

Lake of the Woods Control Board

The Canadian Lake of the Woods Control Board was first formed under authority of Dominion Order in Council, P.C. 150, dated January 21, 1919, and consisted of four qualified civil engineers, two appointed by that Order in Council to represent the Dominion and two appointed by an Order of the Executive Council of Ontario, dated February 13, 1919, to represent the province of Ontario. The responsibilities of the board were concerned with the regulation of the levels and outflow of lake of the Woods.

At a conference of representatives of the Dominion, of Ontario, and of Manitoba, held in Ottawa on January 31, 1921, it was unanimously agreed that concurrent legislation should be enacted by the Dominion and the province of Ontario to set up a Lake of the Woods Control Board with authority to control all existing and prospective structures in the waters of the Winnipeg and English rivers in the province of Ontario. The Dominion enactment of the concurrent legislation, designated *The Lake of the Woods Control Board Act, 1921*, was accordingly passed by the Parliament of Canada on May 3, 1921, but owing to lack of support the corresponding provincial legislation was withdrawn in the Ontario legislature.

The activity of certain power proposals on the Winnipeg river made it essential that there should be full legislative authority behind the Control Board and to meet the situation which had arisen *The Lake of the Woods Regulation Act, 1921*, was passed by the Parliament of Canada on June 4, 1921. This latter Act declared all existing and prospective works and structures in the Winnipeg and English rivers, which affected the flow or natural levels of these waters, to be for the general advantage of Canada. It made no change in the control of

the power resources. The Act provided that the Governor General in Council might make and enforce such regulations as he might consider necessary for securing the most dependable flow of the Winnipeg and English rivers; for regulating the level of lake of the Woods as recommended by the International Joint Commission; and for regulating the level and outflow of lac Seul. The Act also provided that the Governor General in Council should have power to appoint a board to aid in the administration and enforce the provisions of the Act, and that he might repeal or suspend that Act should the concurrent legislation (as previously referred to) be passed by the Ontario legislature.

Pursuant to the *Lake of the Woods Regulation Act, 1921*, Order in Council P.C. 3523, dated September 21, 1921, was passed by the Dominion Government authorizing that the four members of the original board be reappointed in their same capacities. This Order in Council charged the Lake of the Woods Control Board with the responsibility of the administration and enforcement of the provisions of the *Lake of the Woods Regulation Act, 1921*, and the preparation for the approval of the Governor General in Council of such regulations as the board might from time to time consider necessary to carry out the provisions of the said Act.

On June 13, 1922, the province of Ontario passed the *Lake of the Woods Control Board Act, 1922*, being the concurrent legislation hereinbefore mentioned, with a provision to the effect that it should not come into force until the repeal by the Parliament of Canada of the *Lake of the Woods Regulation Act, 1921*.

Early in 1928, an agreement was made between the Dominion of Canada, the province of Ontario and the province of Manitoba, to provide storage on lac Seul. This agreement was confirmed by the Dominion by the enactment of the *Lac Seul Conservation Act, 1928*, passed by the Parliament of Canada on June 11, 1928, which Act also provided for the repeal of the *Lake of the Woods Regulation Act, 1921*, on the day upon which the Lieutenant-Governor of the province of Ontario should bring into force by his proclamation the *Ontario Lake of the Woods Control Board Act, 1922*. The agreement was similarly confirmed by the province of Ontario in the passing of the *Ontario Lac Seul Conservation Act, 1928*.

As provided by the Dominion and Ontario *Lac Seul Conservation Acts, 1928*, proclamations were issued by the Governor General of Canada and the Lieutenant-Governor of Ontario which had the effect of repealing the *Lake of the Woods Regulation Act, 1921*, and bringing into force the *Dominion Lake of the Woods Control Board Act, 1921*, and the *Ontario Lake of the Woods Control Board Act, 1922*, i.e. the concurrent legislation, all to take effect as from June 30, 1928.

This concurrent legislation thus forms the existing statutory authority for the joint regulation of the lake of the Woods and the Winnipeg and English rivers. It provides that there shall be a board to be called "The Lake of the Woods Control Board," which shall consist of four members, who shall be duly qualified engineers, two of whom shall be appointed by the Governor General in Council and two of whom shall be appointed by the Lieutenant-Governor of Ontario in Council, and that it shall be the duty of the board to secure severally and at all times the most dependable flow and the most advantageous and beneficial use of the waters of the Winnipeg and English rivers. The legislation provides that for these purposes the board shall have the power to regulate and control the outflow and levels of the lake of the Woods as recommended by the International Joint Commission; to regulate and control the outflow and levels of lac Seul in such manner as the Governor General in Council and the Lieutenant-Governor in Council may determine; and to regulate and control the flow of the Winnipeg river between its junction with the English river and lake of the Woods, and also the flow of the English river between its junction with the Winnipeg river and lac Seul.

The Lake of the Woods Control Board had continued to function under the authority of the *Lake of the Woods Regulation Act, 1921*, but under the new legislation it was necessary to reappoint the members of the Board. Accordingly, Dominion Order in Council P.C. 1047, dated June 20, 1928, authorized the appointment of the Director of the Dominion Water Power and Reclamation Service and the Chief Engineer of the Department of Public Works as the two members to represent the Dominion Government on the Board, and an Ontario Order in Council, dated June 27, 1928, authorized the appointment of two members to represent the province of Ontario on the Board.

For the proper performance of its duties the Board is to a large extent dependent upon the collection of hydrological and meteorological data relating to the watershed, and the Board is now deriving the benefit of comprehensive basic records which have been gathered by the Dominion officials over a period of years.

The *Lake of the Woods Convention and Protocol* between His Britannic Majesty in respect of the Dominion of Canada and the United States, for regulating the level of lake of the Woods, signed at Washington February 24, 1925, provides in Article 3, that the Government of Canada shall establish a Canadian Lake of the Woods Control Board and that there shall be established and maintained an International Lake of the Woods Control Board composed of two engineers, one appointed by the Government of Canada and one by the Government of the United States, and that whenever the level of the lake rises above elevation 1061 sea-level datum or falls below elevation 1056 sea-level datum the rate of total discharge of water from the lake shall be subject to the approval of this International Board. The Director of the Dominion Water Power and Reclamation Service was appointed as the Canadian member of the International Lake of the Woods Control Board under authority of Order in Council P.C. 1516 dated October 1, 1926.

Lake of the Woods Regulation.—During the fiscal year the inflows to lake of the Woods were above normal and the board was compelled to maintain outflows greater than normal in order to hold lake level below the upper storage limit and to provide storage capacity to handle the annual spring freshets. Lake level was drawn down to elevation 1059·9 on April 27, 1928, and due to heavy precipitation over the watershed, rose above elevation 1061·0 on June 18. By virtue of the provisions of the Lake of the Woods Convention, the regulation of the lake on reaching this elevation automatically passed into the hands of the International Lake of the Woods Control Board. Lake level was drawn below elevation 1061·0 on August 4 but rose above elevation 1061·0 on September 15 and was again drawn below elevation 1061·0 on November 9. Close co-operation was maintained between the Canadian and the United States members of the International Board, and Dominion officials continued to operate the control structures at the lake outlets under the International Board's supervision. At no time during the fiscal year was the lake level allowed to rise appreciably above the upper storage limit of elevation 1061·25, and this was effected without causing undue inconvenience to interests on the Winnipeg river or at the lake outlets. Considerable excess water was wasted during the winter with a view to providing a safety margin of storage capacity to handle possible high spring inflows. On March 31, 1929, lake level was at elevation 1059·75 and there was no indication of a recurrence of flood conditions.

Throughout the fiscal year the board was indebted to the Department of Public Works for run-off records on Rainy and Namakan lakes, and to the Dominion Meteorological Service and the United States Meteorological Service for precipitation records at the numerous stations throughout the watershed.

Lac Seul Regulation.—As heretofore stated, the Dominion and Ontario *Lac Seul Conservation Acts, 1928*, confirmed the agreement made between the

Dominion Government, the Ontario Government and the Manitoba Government on February 28, 1928, and became effective on June 30, 1928. This agreement provided for the construction of the Lac Seul conservation dam by the Ontario Government. Construction work on the dam was started immediately and the structure was practically completed on March 31, 1929.

Water Power Regulations and Legal Research

Two amendments were made to the Dominion Water Power Regulations by Order in Council of September 10, 1928, one dealing with certain conditions to be observed in the revision of rentals and the other requiring that current rates of wages must be paid to all those employed in the construction, operation and maintenance of works authorized by licence. Interim licences under the regulations were issued authorizing the development of Seven Sisters falls on the Winnipeg river in Manitoba, Island falls on the Churchill river in Saskatchewan, and the Ghost-Radnor site on the Bow river in Alberta. The works thus authorized are designed to have, when completed, a total installed capacity of 345,000 horse-power.

The study of Dominion and provincial legislation and jurisprudence relating to the uses of water has been continued and a large amount of material compiled in recent years was supplied to the Department of Justice in connection with the recent Water Power Reference before the Supreme Court of Canada.

British Columbia Administration

The Railway Belt Water Act, under which the Dominion waters in the Railway Belt of British Columbia are administered by the provincial authorities, was amended in 1926 to enable the administration to be conducted in conformity with the most recent provincial water acts and some further amendments were made for that purpose in 1928, (Chapter 6 of that year).

The examination of all water rights granted by the province in the Railway Belt has been continued for the protection of Dominion interests, and the District Chief Engineer at Vancouver has kept in close touch with the proposals of the Westminster Power Company on the Mesliloet river and its tributaries and the plans and construction operations of the Western Power Company of Canada at Ruskin on the Stave river. Applications for water records have been prepared on behalf of the Department of Indian Affairs in connection with the improvement of Indian reserves throughout the province and surveys and investigations made as required. Assistance has also been given in connection with the adjudication by the Board of Investigation under the Water Act on Indian claims to the use of water.

Engineering Co-operation with the Department of Indian Affairs

In Ontario an inspection was made of the conditions above the power dam at the Indian school near McIntosh and plans and estimates prepared for the water supply and sewage systems for the Cecilia Jeffrey Indian school near Kenora, work on which is now under way. In Manitoba an extension was made to the sewage system at Sandy Bay school on lake Winnipeg. In Saskatchewan the water supply system for the Guy Indian school near Sturgeon Landing was repaired; water supply and sewage systems were constructed under contract for the Onion Lake school north of Lloydminster, at a cost of $17,500; and an inspection made and report prepared on necessary repairs to the water supply system for the Indian hospital at Ile à la Crosse.

In British Columbia a large number of investigations were made and construction projects supervised in connection with irrigation and other improvements for the benefit of Indian reserves, schools, and villages. The investiga-

tions made numbered 36, of which 17 were for irrigation schemes and improvements; water supply, 8; sewerage, 1; water rights, 2; electric light and power, 2; miscellaneous, 6. There were 17 separate construction projects under the supervision of local staff, not all of which were completed at the end of the fiscal year. Of these, 9 were irrigation and storage projects, 5 water supply, 1 sewerage, and 2 for electric light and power. The total cost of these improvements was about $38,000.

A further description of this co-operative work will be found in the separate report.

Water Resources Index Inventory

The Index Inventory system for recording and collating the water resources data of the Dominion has been in actual use for a number of years and has provided a most efficient method for the referencing, analysis, standardization, and filing of all data relating to the subject of water resources. A detailed description of the system has appeared in the annual report for 1916-17 and in the combined reports for the years 1917-18-19.

The system has been applied to practically all phases of the work carried on by the service, among the more outstanding of which may be mentioned the complete census of developed water-power, the analysis of central electric station activities, undeveloped water-power resources, stream measurement activities, and storage investigations.

This work has been largely carried on in co-operation with provincial organizations, notably the Hydro-Electric Power Commission of Ontario, the Quebec Streams Commission, the British Columbia Water Rights Branch, the Nova Scotia Power Commission, and the New Brunswick Electric Power Commission. The data compiled are being continually revised in accordance with the most up-to-date information and, resulting from a number of years of effort, a very large amount of information in standardized form is now available.

Water Power Resources of Canada

The most recent analysis places the available water-power throughout the Dominion at 20,197,000 horse-power for conditions of ordinary minimum flow and 33,113,200 horse-power ordinarily available for six months of the year. This analysis takes account of every known rapid, fall, and power site, but cannot be taken as final because there are, particularly on the northern rivers, rapids and falls concerning which there is insufficient data upon which to base estimates of power. In addition, there are opportunities of securing economic heads on rivers of gradual gradient, or possible storage and diversion opportunities, which cannot be appraised until detailed field surveys have been made. Nevertheless, the figures given above probably approximate fairly closely the power available under the conditions of flow stated.

The power ordinarily available for six months of the year may be taken as indicating approximately the combined commercial capacities of the various sites on the assumption that any deficiency during the remaining six months can be made up from the storage of excess waters or by the installation of auxiliary fuel power equipment. That this assumption is quite conservative is demonstrated by a study of the power development which has already taken place in Canada, for this reveals that the turbines actually installed in Canada exceed by 30 per cent the six months' power capacity of the developed sites and this installation has already proved to be good commercial practice. If, therefore, the turbine installation continues at the same ratio the present recorded resources will justify an ultimate installation of about 43,000,000 horse-power.

On January 1, 1929, the total water-wheel and turbine installation throughout Canada amounted to 5,349,232 horse-power which, according to the argument just concluded, means that the installation amounts to a little less than 12½ per cent of the ultimate capacity and already represents a capital investment of nearly $1,175,000,000 for generation, transmission and distribution.

An analysis of the present installation indicates that:—

(1) 4,445,693 horse-power or 83·1 per cent of the total, is installed in central electric stations for general public distribution.

(2) 572,976 horse-power or 10·7 per cent, is installed in pulp and paper mills which, in addition, use power purchased from the central electric stations to the extent of approximately 790,000 horse-power, making a total of about 1,363,000 horse-power used in this industry.

(3) 330,563 horse-power or 6·2 per cent, is installed in general industrial enterprise, for electro-chemical reduction, mining, manufacturing, lumbering, flour milling, and other purposes.

The installation of 554 turbine horse-power per 1,000 of population compares very favourably with the installation in other countries and, in an era when the prosperity of a country is so closely linked with the mechanical power available to its workers, represents a very substantial national advantage.

The year 1928 was an active one in the water-power field; 550,300 horse-power of new installation was brought into operation, whilst new developments, many of which are approaching completion, will add over 1,200,000 to the total in the near future. Of this new plant now under construction it is significant that four sites are located in the Prairie Provinces and that one of these, on the Churchill river in Saskatchewan, is the first water-power development of any importance in that province.

Census of the Central Electric Station Industry

Canada's central electric station industry, the generation or distribution of electrical energy for public use, has attained record proportions because the wide distribution and accessibility of her abundant water-powers is such that, with modern methods of transmission, low cost hydro-electricity for industrial, agricultural, and domestic use is available to all but a small proportion of her population. In the sections remote from water-power, abundant supplies of native fuels constitute potential sources of electricity.

The certainty of the supply of power and the assurance of its continuance at initial contract or lower rates through the medium of the central stations has done much to attract industries which would not in the ordinary course engage in the production of their own power. In the central electric station industry over 95 per cent of the primary power equipment is energized by falling water, while the diversity of use of hydro-electricity induced by moderate prices results in almost 99 per cent of the total electrical output being generated in the hydraulic stations.

The foregoing facts premise the importance to this service of the frequent periodic revision of all basic data relating to the central electric station industry and this revision is accomplished through the medium of an annual census inaugurated by the Dominion Water Power and Reclamation Service and conducted in co-operation with the Dominion Bureau of Statistics of the Department of Trade and Commerce.

The general statistics of this census are made available through annual reports issued by the Dominion Bureau of Statistics, while at longer intervals a Directory of Central Electric Stations presenting a comprehensive review of the scope and character of all organizations, commercial or municipal, distributing electricity for sale, is published. The various aspects of personnel;

capital invested; generating, transmitting and distributing equipment used; power generated, purchased and sold; blocks of power available for sale; rates and transportation facilities are presented in a form that renders the directory a highly valuable reference to the extensive financial and technical interests concerned with the industry.

The general statistical review of the eleventh annual census that for the calendar year 1927 will shortly appear in preliminary form and will be followed later by the final report, while the third issue of the Directory descriptive of conditions obtaining May 1, 1928, is now available for distribution.

Dominion Hydrometric Survey

The Dominion Hydrometric Survey embraces stream measurement work throughout Canada. The records are brought together in one central agency, which attends to the compilation and dissemination of stream flow data and the survey operates efficiently both as regards office administration and field operations.

In the Prairie Provinces the work is the direct responsibility of the Dominion Government and in the other provinces the survey is carried on by the Dominion Government under co-operative agreements with the provinces concerned. The Dominion is divided into major drainage divisions, which, together with the district office or offices in charge, are as follows: Pacific drainage, Vancouver; Arctic and Western Hudson Bay drainage, Calgary and Winnipeg; St. Lawrence and Southern Hudson Bay drainage, Ottawa and Montreal; Atlantic drainage, Halifax.

The uses to which the records are put are primarily in connection with water-power development and irrigation projects, and the rapid strides which have taken place in the hydro-electric field are due in no small part to the detailed and extensive records of the regimen of the numerous lakes and rivers of the country which have been made available, by the Dominion Hydrometric Survey, assisted by the voluntary co-operation of the provinces, of private corporations, and of numerous individuals.

Run-Off Conditions in Canada.—As set forth in detail in the annual reports of the District Chief Engineers, the average run-off for the year has been generally normal in the Pacific, Arctic, and Western Hudson Bay and Atlantic drainages and above normal in the St. Lawrence and Southern Hudson Bay drainage.

In the Pacific drainage typical stations showed a range in run-off for the year from 64 per cent of the long term mean in Capilano creek in the coast region to 114 per cent of the long term mean in the Kootenay river at Wardner.

In the Arctic and Western Hudson Bay drainage typical stations showed a range in run-off for the year from 37 per cent of the long term mean in the Swan river in Manitoba to 127 per cent of the long term mean in the Assiniboine river in Manitoba.

In the St. Lawrence and Southern Hudson Bay drainage typical stations showed a range in run-off for the year from 131 per cent of the long term mean in the St. Maurice river in Quebec to 200 per cent of the long term mean in the Missinaibi river in northern Ontario.

In the Atlantic drainage typical stations showed a range in run-off for the year from 93 per cent of the long term mean in the La Have river in southwestern Nova Scotia to 103 per cent of the long term mean in the St. Mary river in eastern Nova Scotia.

Power and Storage Investigations

Power and storage investigations involving field studies were strictly limited to those made necessary by special circumstances or by requests of organizations receiving co-operative assistance from this service. Throughout the year office studies were continued in re-analysing and keeping up-to-date the records of undeveloped and developed water-power resources of all parts of the Dominion.

In British Columbia co-operation was continued with the city of Vancouver in the matter of special studies relating to the investigation of nearby hydro-electric possibilities, also with the Greater Vancouver Water District in its investigations for a satisfactory water supply. Investigations were also co-operatively made with a number of hydro-electric organizations in connection with power possibilities, on such rivers as the Elk and Bull in the East Kootenay district, the Nascall and Dean on the Mainland coast, and the Campbell and Nimpkish on Vancouver island. An intensive study of the hydraulic features of the Kootenay drainage from the International Boundary to a point several miles below Nelson was continued with special attention being given to the flow in the West arm of Kootenay lake.

In Alberta certain field investigations were made in connection with the Ghost development on the Bow river, construction of which was commenced by the Calgary Power Company under the terms of an interim licence issued by the department. Inspections were also made of a number of extensions to the transmission system of the Calgary Power Company in the territory lying between Calgary and Edmonton. Responsibility for the operation of the Lake Minnewanka storage during the filling season was again assumed by the department with satisfactory results.

In Manitoba inspections were made of the work carried on at Great Falls on the Winnipeg river where the power station was completed to its full installed capacity and considerable work was done on the rock-fill dam in making this structure water tight. Inspections were also made of the work done by the city of Winnipeg at Eight Foot falls on the Winnipeg river in enlarging the channel for the purpose of improving tail water conditions at the Point du Bois station.

In Ontario co-operation was afforded the Ontario Government authorities in making a survey of lac Seul to determine the extent of lands to be flooded in securing storage on this lake. Assistance was again afforded the International Lake Superior Board of Control in recalibrating the discharge through the dams at Sault Ste. Marie and on the Niagara river, field and office studies were continued in close co-operation with the investigation being made by the Special International Niagara Board appointed to report upon the preservation of the scenic beauty of Niagara falls. Work was also commenced in co-operation with the Ontario authorities in the re-analysis of the developed and undeveloped water-power resources of the province in preparation for the publication of a revised list of these resources.

In Quebec the exhaustive list of Quebec water-powers compiled by this Service in co-operation with the Hydraulic Service of the Quebec Department of Lands and Forests and the Quebec Streams Commission was finally revised, brought up-to-date and published for public distribution by the latter.

In New Brunswick an inspection was made of the international section of the St. Croix river in connection with the duties of the International St. Croix River Board of Control.

In Prince Edward Island an investigation was made of a power site on the Midgell river and a report prepared for the interested municipalities of St. Peters and Morell. A field study was also made on the Hunter river and a report prepared covering the power possibilities.

In Nova Scotia important investigations were carried out at the request of the Nova Scotia Power Commission on the Ingram, Sackville, North East, and Herbert rivers. Brief investigations were also made by special request of the power possibilities of two small streams on Cape Breton island.

IRRIGATION

Climatic conditions during the early part of the year 1928 were abnormal and unsatisfactory from an agricultural standpoint. A lack of moisture and high winds combined to create a condition ill suited to seeding and seed germination. Later in the growing season commencing early in June there was abundant rainfall recurring at intervals until harvest, hence little water was utilized for irrigation.

Considerable reclassification of irrigable lands in several of the major projects was undertaken during the year and various studies looking to more efficient irrigation practice were continued. These studies include seepage and alkali problems and investigations carried on for a number of years at the Brooks "Duty of Water" experimental station, with which are associated certain co-operative studies with the Seed Branch of the Department of Agriculture.

Water Administration

During the calendar year 1928, there were 30 water licences issued under the provisions of the Irrigation Act and 72 applications for such licences were received. At the end of the year there were 1,070 water licences, 22 temporary permits and 245 authorizations recorded in the department, and, in addition, 257 applications under investigation.

Inspection Work

Routine field work in connection with the administration of the Irrigation Act, comprising investigation of new applications, surveys, preparation of plans and inspection of operating projects was continued, together with canal and stream measurements and the study of seepage losses. Field engineers engaged on this work inspected 354 established projects, investigated and surveyed 60 new projects, made 2,158 gaugings of stream and canal discharge, and carried out the usual annual inspection of the large company projects and irrigation districts.

General River Control

Field investigations were made and reports submitted on flood conditions on the following: South Saskatchewan, Highwood, and East and West Prairie rivers. Due to early Chinook winds much of the run-off occurred during the months of January and March and, as the rainfall was scanty during April and May, little trouble was experienced from floods.

Major Irrigation Projects

Canadian Pacific Railway, Western Section.—During the season 3,890 acres were irrigated, an increase over the previous season of more than 2,600 acres. The total cropped area was 231,550 acres, producing crops valued at $4,974,000, based on the average values in the irrigation districts and representing a per acre return of $21.50; 173,700 acres of this area were seeded to wheat and produced an average of 24·1 bushels per acre.

Canadian Pacific Railway, Eastern Section.—The acreage irrigated during the season was 45,680, being an increase over the previous year of 37,760 acres. The total cropped irrigable area was 45,680, which produced $864,480, based on the average unit values and representing a per acre return of $18.90. The area in wheat was 23,090 acres, which produced 495,880 bushels, or 21·5 bushels per acre.

Canadian Pacific Railway, Lethbridge Section.—The area irrigated was 22,085 acres, a little less than the previous season. The total cropped area was 61,585 acres which produced $1,671,350, or $28.60 per acre, from the irrigated land and $26.30 from the non-irrigated land. The major crop was wheat which represented 57 per cent of the cropped area and produced an average of 31·3 bushels per acre on the irrigated land and 27·4 bushels per acre on the non-irrigated land.

Taber Irrigation District.—The area actually irrigated was 3,170 acres—1,570 during the summer and 1,600 in the fall. The total cropped irrigable area was 15,880 acres, producing $470,050 or a per acre return of $29.60. The principal crop was wheat, which represented 44 per cent of the area on irrigable land. The sugar beet area was 2,270 acres, an increase of 640 acres over the previous season. The average yield was 8·3 tons per acre and the saccharine content of the beets from all areas averaged 17·33 per cent. This crop averaged $8.25 per ton and the total revenue to the district amounted to $155,067, the per acre return being $68.30.

Canada Land and Irrigation Company. This company enlarged the settled area of its project by the sale of 7,300 acres of land during 1928. This brings the total area of irrigable land sold to approximately 28,200 acres and, with 4,500 acres of irrigable land in the New West District, makes a total of 32,700 acres served with water by the company. Approximately 15,000 acres of new land were served with water for the first time during 1928. Crop results, as a whole, were not up to the average of previous years, due to the unusual weather conditions in spring and fall. The area irrigated was 15,680 acres, a decrease from the previous season of 970 acres. The total cropped area in the project was 21,050 acres, producing $408,440, or a per acre return of $19.40. The area in wheat was 16,630 acres, which produced 327,570 bushels, or 19·7 bushels per acre.

New West Irrigation District.—The area irrigated in this district during 1928 was 3,630 acres, and the total area under crop was 4,800 acres, producing $81,030, or a per acre return of $16.85. The major crop was wheat, which represented 85 per cent of the total irrigable area and yielded an average of 18·2 bushels per acre.

Lethbridge Northern Irrigation District.—An area of 33,440 acres was irrigated in 1928, an increase of approximately 23,000 acres over that served in 1927. The total cropped irrigable area was 107,160 acres, producing $1,616,140, or a per acre return of $15.10. Of this area 72,800 acres were in wheat, producing 949,650 bushels, or 13 bushels per acre. Unfavourable weather conditions from the end of July until the close of the growing season did serious damage to the crops.

United Irrigation District.—The area irrigated in the United Irrigation District was 2,580 acres, but the total cropped irrigable area was 25,490 acres, producing $408,140, or a per acre return of $16. On the irrigable lands the area in wheat was 18,500 acres, producing 416,170 bushels, or 22·5 bushels per acre. Bad weather did considerable damage to the wheat crops in this district reducing both yield and grade.

Magrath Irrigation District.—Some 800 acres, or about 11 per cent of the total irrigable area, was served with water in 1928 but no crop returns are available from this district.

Raymond Irrigation District.—This canal system, supplied with water through the works of the Canadian Pacific Railway, Lethbridge Section, was again in use, 1928 being its second year of operation as a unit. About 15,000 acres can be irrigated in this project but no data are available as to the area irrigated or the crop yields obtained.

Little Bow Irrigation District.—This district, comprising a number of small individual pumping units, diverts water from the Highwood river at the town of High River. The diversion works connecting the Highwood river with the Little Bow river were constructed in 1923, but to date none of the individual schemes has been installed.

Mountain View Irrigation District.—Authorization for the construction of the works of this district was issued on June 23, 1925, but the project has not yet been completed.

Alkali Test Plots at Maple Creek, Saskatchewan

These experimental plots have been carried on for seven years to obtain some reliable data regarding the effect of irrigation on heavy soils with high alkali content. It is proposed to continue the experiments over a further period of three years. The growth of alfalfa in these plots continues to be heavy and as no evidences of alkali were noticed during the season it can reasonably be assumed that the movement of the injurious salts is downward. The successful production of alfalfa on these plots has aided in inducing two local farmers to undertake the development of a portion of the Maple Creek plots for the growth of alfalfa under irrigation.

Duty of Water Investigations

Several new projects were started on the Brooks "Duty of Water" Experiment Station in 1928. Four different crop rotations were devoted to a study of the effect of time of irrigation on the duty of water and the amount of water used by crops during different stages of growth. These rotations enabled a study to be made of the influence of soil fertility on the duty of water for the commonly grown crops.

The water requirements of sugar beets were studied on eight crop series varying in fertility from high, immediately following a leguminous crop, to low on several crops removed from the legume. These series received four-inch irrigations varying from one to four applications each. A project was started to determine the relative value of three legumes, alfalfa, red clover, and sweet clover, as soil improvement crops. These legumes are to be ploughed under, one-half when one year old and one-half when two years old. Their value as soil fertility builders will be indicated by the number of bushels of wheat produced in the next one, two or three years after being ploughed under. The irrigation treatment of the legumes will be varied to determine what irrigation duty produces the maximum soil enrichment.

The influence of commercial fertilizers on the duty of water was studied, using superphosphate on Marquis wheat.

The weather during 1928 showed some unusual features in respect to precipitation and temperature. During the first five months of the year less than 1·50 inches of moisture fell and by the end of May extreme drouth conditions prevailed. Conditions were not favourable for germination or early growth and some crops had to be irrigated to insure germination. Rains from June 3 until the end of July adequately supplied crop needs and excellent growth

was made during this period. Low temperatures during the latter part of the growing season were not favourable for growth. Maturity was retarded by cool weather in August. There was no precipitation of any consequence during September and October and conditions were very favourable for harvesting and threshing.

A complete report of the 1928 Irrigation Investigations at Brooks is contained in a separate report of this service

Irrigation Extension Work

Some fifteen tracts were selected in the irrigated districts of southern Alberta for which soil moisture records were kept during the growing season. A soil moisture test of each field every ten days, reported in the local press, enabled the extension engineer to keep the water users advised at all times during the season regarding the water content of their fields and as to when and in what amount irrigation water should be applied. The influence of irrigation on root development and the influence of root development on the depth to apply per irrigation, yield, etc., were studied for sugar beets. Farmers were assisted in the location of field ditches and in general advised concerning the best irrigation practice for the crops they were growing. The information secured at the Brooks Station was given the farmers by means of bulletins, demonstrations, and lectures.

Drainage Surveys and Investigations

Drainage administration during the year 1928-29 was confined again mainly to the development of small drainage schemes. The department however has maintained supervision over the Low Water Lake, Waterhen Lake, McArthur Land Company, and Western Manitoba Dairy Farms schemes, and kept in contact with provincial drainage schemes in the provinces of Saskatchewan and Alberta.

Small Projects

One hundred and eleven small schemes were inspected, twenty-four applications dealt with, seven schemes authorized, six sales of Dominion land made and fifty-six applications cancelled. The weather during the past season was exceptionally favourable for construction work and excellent progress has been made in the development of the majority of these schemes.

Waterhen Lake Drainage Project

The hay crop was again good, some three hundred tons of natural hay being cut from two hundred acres. Six hundred acres were sown to barley but the return was below average owing to unfavourable conditions in the early fall. The reclaimed land appears particularly suitable for the growing of fodder crops. Considerable work was done by the lessees of the reclaimed land in this project in cleaning out old surface ditches and excavating new lateral ditches.

Provincial Drainage Districts

Application was made for the formation of a district from residents in the vicinity of Big lake, near St. Albert. The district was formed under the name of "Big Lake Drainage District" and a board of trustees elected. Repair and maintenance work has been carried on in the districts, which were all operated successfully and are in good financial condition.

In Saskatchewan considerable progress was made in development and work was completed in District No. 28, known as the Grand Coulée Drainage District.

Construction work was also carried on in District No. 13 in the vicinity of Lewvan. The formation of a district in the vicinity of Kronau on Wascana creek was suggested but no definite decision has as yet been arrived at.

Low Water Lake Project

In connection with this scheme for 7,840 acres situated in townships 50 and 51, ranges 4 and 5, west of the fifth meridian, further surveys were made for the purpose of locating "catch-water" ditches around the northern part of the lake. Arrangements are now being made by the Northern Alberta Drainage Company to carry out this work, involving approximately 40,000 cubic yards of excavation, this season.

East and West Prairie Rivers Project

An investigation was carried out by the department to determine the feasibility and cost of reclaiming some 40,000 acres of land that is flooded annually by the East Prairie, West Prairie, and Heart rivers in townships 74, 75 and 76, ranges 15, 16, 17 and 18, west of the fifth meridian. It was reported that the reclamation could be achieved at a cost of $250,000 by diverting the flood flows of the West Prairie and Heart rivers to the Smoky river in the adjoining drainage basin to the west.

Seine River Scheme

The department carried out an investigation to ascertain the extent and cost of remedial works required to reclaim some 45,000 acres of land, situated in the Seine River valley, Manitoba. This land is low lying and subject to annual overflow from the river. The cost of the necessary cut-off canals, diversion channels and drainage ditches was estimated at $268,000.

Icelandic River Scheme

Investigations were carried out to determine the feasibility and cost of reclaiming a considerable area of land adjoining the Icelandic river in townships 22 and 23, ranges 1, 2 and 3, east of the Principal meridian, which is periodically flooded by the overflow of this river. The suggested remedy involves the construction of an auxiliary drainage canal for a length of sixteen miles to intercept about twenty-five per cent of the run off tributary to the river and to conduct it to an adequate outlet other than by the existing river channel. The cost was estimated at $110,000.

Manitoba Dairy Farms Limited—Western Project

During the year an inspection was made of the ditches in townships 4 and 5, range 9, east of the Principal meridian, constructed by the Manitoba Dairy Farms Limited in the fall of 1927. These ditches were found to be functioning quite satisfactorily and considerable evidence of their beneficial effect in reclaiming the adjoining land was observed. This inspection was made jointly by engineers of the department and of the provincial Government.

Manitoba Dairy Farms Limited—Eastern Project

The investigation carried out by engineers of the department to ascertain the feasibility, desirability, and cost of the proposed Eastern project of the Manitoba Dairy Farms Limited in townships 1 to 11, ranges 9 to 17, east of the Principal meridian, was completed and the report submitted during the past year. This drainage application is now receiving the attention of the department.

Kootenay Flats Project

This department, at the instance of the Department of Indian Affairs, carried out a full field investigation of the proposed scheme of the Creston Reclamation Company in Kootenay Flats, British Columbia. The scheme includes 8,600 acres of which about 2,000 acres are Indian lands.

Fur Farming

The northward spread of agricultural settlement has encroached on the wild areas formerly devoted to trapping, and the ever-growing market for furs, together with the decreasing area available to the fur bearers, has led to the establishment of farms where these animals are reared in captivity. Although originally confined almost exclusively to foxes, the industry has widened out and a great deal of attention is now being given to the rearing of muskrats.

To foster this industry, the federal Government recently reached an agreement with the provinces of Alberta and Saskatchewan whereby vacant and available Dominion lands containing suitable water or marshy areas are leased to the provinces free of charge. The provinces, in turn, sub-lease these areas to individuals who wish to engage in fur farming which is carried on under provincial regulations. The interest taken in this industry is shown by the fact that during the past fiscal year 603 applications were received and 226 leases were issued by the department. The total area covered by these leases is 149,063.2 acres. The total area covered by leases issued to date to the provinces of Alberta and Saskatchewan is 161,701.1 acres.

VI

NORTH WEST TERRITORIES AND YUKON

REPORT OF THE DIRECTOR, O. S. FINNIE

All matters, with the exception of mining, pertaining to the Department of the Interior, having to do with the Northwest Territories and Yukon are under the control of this branch. Owing to the rapid development of mineral resources in Manitoba, Saskatchewan, and Alberta, the supervision of mining, petroleum and natural gas in the three western provinces was transferred to a new branch—the Office of the Supervisory Mining Engineer. The Supervisory Mining Engineer's statement now appears as Part II of this publication.

Northwest Territories

General.—The development of natural resources throughout the Territories has made steady progress. More interest has been taken in prospecting for minerals than in any previous year, and surveys by land and air have been extended to remote parts of the country. The fur trade, which remains the staple industry, has been moderately good. Special officers of this branch have been investigating living conditions and studying wild life in the interior and along the coast from Davis strait to Mackenzie delta.

During the spring of 1928 there was a serious outbreak of influenza among the natives in the Mackenzie valley. As soon as possible remedial measures were taken to cope with the situation in spite of the difficulty of securing additional medical assistance and also that of dealing with natives in their homes and encampments. By the indefatigable and self-sacrificing labours of those connected with hospitals and missions, assisted by practically the whole white population, the epidemic was eventually stamped out.

Commencement was made in the establishment of telephone communication between the office of the superintendent and strategic points within the Wood Buffalo park. A wireless station was established at Resolution on Great Slave lake as part of the general wireless system which has been built up during the past four years.

Northwest Territories Council.—There were two sessions of the Northwest Territories Council. Dr. Duncan Campbell Scott, the Deputy Superintendent General of Indian Affairs, was appointed by Order in Council to fill the vacancy caused by the death of Mr. John Wesley Greenway, late Commissioner of Dominion Lands.

The composition of the Council is now as follows: Commissioner, William Wallace Cory, C.M.G.; Deputy Commissioner, Roy Alexander Gibson; Councillors, Dr. Charles Camsell, Oswald Sterling Finnie, Dr. Duncan Campbell Scott, Henry Howard Rowatt, Col. Cortlandt Starnes.

Legislation entitled the Dog Ordinance was passed, providing for the control of all dogs while within the boundaries of settlements. Owing to the large part which dogs play in the economy of the north land this enactment is important to residents in the Territories. Consideration was given to the need for amending the Northwest Territories Act and the Northwest Game Act, and the advisability of reducing the area of some of the native game preserves.

Scientists' and Explorers' Ordinance.—Forty-nine licences were issued without charge under the provisions of the Scientists' and Explorers' Ordinance to scientists and others for the purpose of exploration, investigation, collecting specimens and data, and also prospecting in the Northwest Territories.

Inspections.—Mr. J. F. Moran, Chief Inspector, conducted a special inquiry into the various phases of conditions prevailing in the Mackenzie District and the western Arctic. He was accompanied by Mr. H. H. Clarke, of the Natural Resources Intelligence Service, Ottawa, as secretary, and from Simpson by Dr. W. A. M. Truesdell, the medical officer stationed at that place. As the nature of the inquiry necessitated a few days' stay in each settlement, the gasolene schooner *Ptarmigan* was used for the work and afterwards taken over by Major L. T. Burwash at Aklavik for his work near King William island.

Mr. Moran continued his inspection in the ss. *Baychimo* to points as far east as Perry river in Queen Maud gulf, returning to Herschel island via Fort Brabant and Walker bay, Victoria island.

Engineering Division.—The office work of the division was largely devoted to: compiling data of the new Northwest Territories map issued in 1929; the drafting of plans and specifications for medical officers' quarters, to be erected at Aklavik, Coppermine, and Chesterfield; preparation of plans for boats intended for service in the Mackenzie River delta; compiling and drafting various maps, charts, and schedules for publications; calculating areas and preparing descriptions of lands which include the Arctic Islands preserve and the Slave River preserve. In addition, the staff prepared 445 plans and sketches; plotted all leases and homesteads in the Yukon Territory, and distributed 1,656 maps. All licences to scientists and explorers and also trading post permits were prepared by this division. Maps and plans received by the branch were indexed and filed. Ten large scale maps of the Northwest Territories showing their relation to the Dominion were also prepared for the purpose of lectures and to illustrate various features.

EXPLORATIONS, INVESTIGATIONS AND PATROLS

Several officers were engaged during the fiscal year in exploring the country, collecting data regarding the flora and fauna of the territory administered by this branch with a view to improving the economic possibilities of the country and the amelioration of the living conditions of the native population.

Annual Arctic Expedition.—The Annual Expedition to the eastern Arctic under the command of Mr. G. P. Mackenzie was again carried out in the ss. *Beothic.* The ship, which was chartered specially for the purpose, sailed from North Sydney, Nova Scotia, on the 19th of July. The ship's company comprised forty-eight persons in all, including thirty-four ship's officers and crew, with the veteran Captain E. Falk, Master. The members of the Expedition comprised: G. P. Mackenzie, Officer in Charge; R. S. Finnie, Moving Picture Operator, and Secretary to the Officer in Charge; Robert T. Bowman, Assistant Secretary; Dr. L. D. Livingston, Medical Officer. Dr. R. M. Anderson, Chief of the Biological Division, Department of Mines, and Inspector A. H. Joy, with eight non-commissioned officers and constables of the Royal Canadian Mounted Police went north with the expedition.

The voyage was without special incident to Godhavn, Greenland, the first port of call, which was reached on the morning of July 26. The officials of the capital of North Greenland greeted the officers of the Expedition with their usual kindness. The Acting Governor and Mrs. Berthelsen, also Doctor and Mrs. Porsild, dined on the ship, and the native settlement was entertained with moving pictures. The Danish authorities have much in common with the department in the administration of northern areas, and the exchange of views

and experiences resulting from this annual visit is, it is thought, of benefit to both Governments. The expedition left the same evening for Pond Inlet, Baffin island, the next port of call.

The crossing of Baffin bay to Pond inlet was made with less difficulty than is usually experienced, the ice being well opened out and the visibility fair. The anchor was dropped off Button point, Bylot island, at 3 p.m. of the 29th to take on board Inspector C. E. Wilcox and four families of natives who, fearing the ship might arrive before the ice had cleared sufficiently to permit passage to Pond Inlet, were awaiting the arrival of the ship at this point. All was well with them and at the post, off which the anchor was dropped at 10 p.m. of the same day. Heavy ice moving down the inlet necessitated a hurried departure, but all freight was landed by 1 p.m. on the 30th, and the anchor was hoisted immediately. The weather was exceptionally fine during that afternoon and night, and very little ice was encountered in the passage to Dundas Harbour, which port was reached at 9.15 a.m., July 31.

On continuing the voyage to the north it was decided to attempt the crossing to Rice strait without stopping at Etah. Extraordinarily heavy ice was encountered crossing the sound and as the Ellesmere coast was approached. the ice was seen to be massed at the south end of Rice strait, but as it appeared fairly open about cape Sabine, it was decided to attempt the passage to Fram Havn around the north end of Pim island and this was accomplished without mishap.

At the northern entrance to Rice strait, the three police from the Bache Peninsula detachment and two natives were awaiting the approach of the ship in the post's motor-boat. Knowing the expedition was due and realizing the impossibility of reaching the detachment with the ship at the time, they had taken the precaution of meeting the ship in these waters. All were well at the detachment.

The anchor was dropped at Fram Havn at noon of August 2. Although the police reports were very unfavourable as to ice conditions in the upper reaches of Buchanan bay and the entrance to Flagler fiord, it was decided that afternoon to make an attempt to reach the detachment. Ten miles up Buchanan bay however the ice was found to be still in solid formation, making it absolutely impossible to get through. There being no material change in conditions by the morning of the 3rd, it was decided that Inspector Joy, accompanied by the police, and natives from the detachment, should endeavour to reach the post by motorboat with the mail and such perishables as could be taken. The party left the ship at 10 a.m. and returned at 8 p.m. on August 4, having experienced great difficulty in making the passage to and from the post. They reported the ice had not yet broken in the upper reaches of the bay. It was decided however, that while the weather remained clear and retreat was not cut, to hold the ship in Buchanan bay in the hope that a westerly gale might still move the ice out, permitting passage through to the detachment. However, after several ineffectual attempts to reach the post, the stores for Bache Peninsula were landed at Fram Havn from which they could be later taken by motor boat or sled to the post about twenty-five miles distant.

On the afternoon of August 6, the start was made on the return voyage. The ice having cleared somewhat from the southern entrance to the strait, little difficulty was experienced for the first ten miles, when exceedingly heavy ice was encountered. The weight and extent of this ice surpassed anything observed by the ship's officers on any previous voyage. At 9 a.m. on the 7th the ship cleared the heavy ice and good progress was made along the Greenland coast. At 2 p.m. the same day the Greenland natives aboard who had been with the police at Dundas Harbour, were landed at

Nerk settlement, Greenland. Fine weather was experienced on the voyage south and the anchor was dropped in Craig harbour at 5 p.m. of the 8th. Here forty-three tons of coal and thirty tons of miscellaneous supplies were taken aboard for distribution to other posts. The weather remained fine and greatly expedited the work of loading, which was completed at 9.45 a.m. of the 10th.

As conditions appeared favourable it was decided to cross the sound to cape Sparbo and make an endeavour to secure motion pictures of a herd of musk-ox known to be in that vicinity. Considerable delay was experienced owing to rain and fog but on the morning of the 12th, the landing party went on shore in the motorboat and although atmospheric conditions were very unfavourable, fairly good pictures of the musk-ox herd were secured. The anchor was hoisted up at 11 p.m. of August 12 and at 9 p.m. of the 13th the anchor was again dropped in Dundas harbour. Inspector Joy was left at this post, which was to be his headquarters for the next year, and as he anticipated making a long patrol to the islands to the westward in the spring of 1929, it was decided to establish a base for the purposes of this patrol on Beechey island. The Expedition left Dundas Harbour in the evening of the 13th. Little difficulty with ice was experienced and at 11 a.m. of the 14th the anchor was dropped in Erebus bay, and the stores cached.

Pond inlet was reached in the evening of the 15th. On the morning of August 16 the ship was again under way and after calling at River Clyde, arrived at Pangnirtung at 11 a.m. of the 20th. All were well at the detachment. Unloading was started at once and was completed by noon of the 22nd. The department's medical officer, Dr. L. D. Livingstone, was left at this port, which was to be his headquarters for the year. Building material for his residence was first landed so that work might be started at once on construction. This was somewhat handicapped by a strong gale on the 22nd, but before the Expedition sailed at 7.30 a.m. of the 23rd, the frame of the structure was up and partially enclosed.

The run to Lake Harbour was uneventful, good weather conditions prevailing, with very little ice. The anchor was dropped at 3.30 p.m. of the 25th. All were well at the detachment. The neat and attractive appearance of the new detachment buildings here was noticeable. Anchor was weighed at 1.30 p.m. of the 26th and the ship left for Burwell, which port was reached at noon on the 27th. Corporal Nichols of the Royal Canadian Mounted Police came aboard as soon as the anchor was down to make his report.

At noon of the 28th of August all freight was ashore and Port Burwell was left behind. The following morning a storm area of mountainous seas was entered and, as the ship was riding light, she rolled dangerously, the decks at times being completely submerged. On the morning of the 30th the wind and the sea moderated and the rest of the voyage home was uneventful.

The Expedition reached North Sydney on the morning of the 2nd of September. All the purposes of the Expedition were accomplished and in record time.

Explorations.—Major L. T. Burwash left Ottawa in June, 1928, for an extended investigation into the Arctic islands, chiefly to study the condition of the Eskimos and their food supplies. He wintered at King William island and in December made a patrol to Boothia peninsula. After leaving King William island he will investigate and report on the copper and other deposits along the Coppermine river.

Mr. J. Dewey Soper is investigating the fauna of southern Baffin island, particularly the nesting ground of the blue goose, the whereabouts of which is unknown. Extensive surveys will also be conducted on the coast and in the interior of the Foxe peninsula. He left Ottawa in July, 1928, and it is expected that he will return in the fall of 1929, when a full report will be made.

Investigations.—Mr. W. H. B. Hoare, investigator, completed the survey of the southern portion of the Thelon game sanctuary, east of Great Slave lake in the Northwest Territories, during the fiscal year under review. The journey to the game sanctuary was started last fiscal year but the survey of the sanctuary had hardly been begun at its close. Mr. Hoare, travelled by rail to McMurray, Alberta, in January, 1928. He took with him a team of six Baffin Island Husky dogs, for the 800-mile journey by sled from McMurray to Fort Reliance, N.W.T. The trip was made by way of Resolution. At Fort Smith, Mr. Hoare was joined by warden Knox of the Wood Buffalo patrol and with two dog teams the party reached Fort Reliance on March 5. A start was immediately made to move over Pike portage the 7,000 pounds of supplies which had been shipped to Fort Reliance the previous summer for the use of the expedition.

It was on May 10, 1928, that the first camp was pitched within the preserve on the east shore of Artillery lake. Travel conditions were very difficult and the further trip eastward, through the Ford-Campbell-Smart chain of lakes within the sanctuary, was slow and laborious. Mr. Hoare found that present-day maps of this area are inaccurate in several respects; the lakes were found to be well supplied with fish, and the verdant valleys in their vicinity afford pasturage for large numbers of caribou. Mr. Hoare estimated that while he was in the district between fifty and seventy-five thousand caribou passed his camp moving southwestward.

After exploring this chain of lakes the party proceeded down the Hanbury river to its junction with the Thelon, which point was reached on October 19. Here work was at once begun on a warden's cabin. On November 22, 1928, having completed the cabin, the party left the Thelon base for the return trip to Fort Reliance. A herd of musk-ox and the tracks of a second herd were seen on the banks of the Hanbury. Striking overland from Grove rapids, Campbell lake was reached on December 1, and the chain of lakes was then travelled to Fort Reliance, which was reached on December 13, after a most arduous trip battling against the winter elements on short rations. Early in 1929 the party started back to explore the more northern portions of the Thelon sanctuary and were so engaged until the close of the fiscal year.

Reindeer.—Mr. A. E. Porsild an experienced botanist and northern traveller, accompanied by his brother Mr. R. T. Porsild, completed in the fiscal year 1928-29 the investigation begun in 1926 to determine the suitability for reindeer grazing of areas in northern Canada. From June, 1926, to March, 1927, the initial part of the investigation was conducted in Alaska by the courtesy of the Government of the United States. This embraced studies of methods of handling domesticated reindeer and examinations of reindeer ranging areas.

About the first of April, 1927, the Messrs. Porsild reached Canadian territory after a winter journey along the Arctic coast of Alaska, spying out a route over which to drive a reindeer herd in event of a decision to establish herds in Canada.

The remainder of the year 1927 was spent in both summer and winter journeyings into and through the region lying between the Mackenzie River delta and Anderson river to the east, and embracing the area around the Eskimo lakes. In February, 1928, the investigators moved southward up the Mackenzie valley to Great Bear lake and spent the spring, summer and early autumn examining the country to the north and east of that lake and embracing the valley of the Coppermine river which flows into the Arctic ocean. Journeys were made by dog-team in winter and by canoe and motor-boat in the period of navigation. They returned to Ottawa in October, 1928, with a large collection of herbarium specimens, especially those of plants suitable for reindeer feed.

In his preliminary report Mr. Porsild states that the country examined contains at least 53,000 square miles suitable for reindeer pasturage and capable of supporting 550,000 reindeer.

Lands.—Three patents were granted covering 2 acres and 17 applications received.

Hospitals.—The basis of payments made by the Department of the Interior for hospital treatment is 50 cents per day for all patients treated and $1.50 per day additional for indigent Whites, indigent Half-breeds, and indigent Eskimos. The total sum paid over during the year, on this basis, to the hospitals at Fort Smith, Resolution, Hay River, Simpson, and Aklavik was $11,199.50, divided as follows:—

Total number of days treated, all patients, 17,893 at 50 cents per day	$ 8,946 50
Indigent Whites, indigent Half-breeds, and indigent Eskimos, 1,502 at $1.50 per day additional	2,253 00
Total	$11,199 50

In addition the department paid out $457 on behalf of mental patients treated at Ponoka, Alberta.

A further grant of $1.50 per day is made by the Department of Indian Affairs for all treaty Indian patients.

Health.—With the exception of the influenza epidemic, during the months of July and August, the health of the population—White, Eskimo, and Indian—has been fairly good on the whole. The influenza epidemic was general but reached an acute stage in the Mackenzie District. In spite of every precaution taken to check its spread there was a number of deaths, chiefly among the aged and infant population.

Education.—Schools were conducted by different missions at Fort Smith, Resolution, Hay River, Providence, Simpson, McPherson, and Aklavik. The sum of $1,975 was expended for their assistance. During the year the Church of England School at Hay River received a grant of $1,206.25 for the maintenance of destitute children and the Roman Catholic School at Resolution received $1,242.50 for the same purpose.

Liquor Permits.—The annual return made to Parliament in accordance with section 88, chapter 62, R.S.C., 1906, shows that 341 permits to import liquor for medicinal purposes covering 663 gallons were issued during the year.

ADMINISTRATION OF THE NORTHWEST GAME ACT

General.—The fur returns, with the exception of muskrat, indicate a reduction in the fur yield compared with the returns for the previous licence year, when the yield was the largest yet recorded. The following is a comparative statement showing the number of pelts of some of the most important fur bearers secured by traders during the licence years 1926-27, 1927-28:—

	1926-27	1927-28
Beaver	8,815	7,287
Fox	41,256	24,946
Lynx	3,220	2,621
Marten	10,591	7,743
Mink	4,943	3,630
Muskrat	130,273	154,648

It would appear that the fur cycle reached its highest peak during 1926–27. Game officers report that land fur in most districts has not been as plentiful since that time.

Buffalo.—During the summer of 1928, 1,088 animals were shipped from Wainwright park, Alberta, to the Wood Buffalo park, N.W.T., making a grand total of 6,673 shipped since 1925 to the present date. From reports received the buffalo are thriving and in good condition and many calves were seen with the herds.

Wood Buffalo Park.—An efficient warden service under the direction of a park superintendent is being maintained. Additional trails have been cut, new cabins erected and a regular patrol system adopted. A few aged buffalo bulls, outcasts from the different buffalo herds, were slaughtered and the meat of the animals distributed among needy native families.

Fires which threatened to assume serious proportions were successfully brought under control by the wardens. The preservation of the winter grazing grounds of the buffalo is important to the welfare of the herd and, with this end in view, fire-fighting equipment has been assembled and fire towers constructed at strategic points. With these aids it is expected that the warden staff, in future, will be able to control, in their initial stages, any fires that may occur.

During the season 1928-29, 51 miles of telephone line were constructed within the area of the Wood Buffalo park. This brings the total up to 97 miles completed during the past two years. When the system is completed wardens stationed in the Wood Buffalo park will have direct telephone communication with the District Office at Fort Smith.

Musk-Ox.—As noted in a previous paragraph under the heading "Investigations", an investigation of the Thelon game sanctuary is being carried out and will be completed in the near future. In addition to the animals there recorded as seen, a few small herds of musk-ox were observed in the sanctuary in 1928.

Caribou.—It would appear that the caribou did not follow their usual route of travel in their southward migration in the fall of 1928. The Indians living in the district adjacent to the boundary between the Northwest Territories and the provinces of Alberta and Saskatchewan reported that few caribou visited that area, whereas large herds were reported in the district immediately north of the province of Manitoba. In their journey north this spring the main herd of caribou passed to the east of Great Slave lake. An unofficial observer stated that a very large number of these animals passed his camp within three days, during the month of March. He was camped on a high plateau near Fort Reliance from which he could see a moving mass of caribou for fifteen miles in each direction.

Beaver.—As stated in last year's report, a close season was provided for beaver in the Northwest Territories for three years from October 1, 1928. Subsequently, representations were made to the department to have the terms of that Order in Council modified in order to permit Indians and half-breeds of the Territories to take a limited number of beaver during the licence year 1928-29. Game officers reported that as a result of the influenza epidemic in 1928 many natives were unable during the summer and autumn to secure their customary supply of fish and meat for winter and were consequently entering upon that season badly prepared. In view of this situation the department decided to permit the head of each Indian and half-breed family to take ten beaver during the period November 28, 1928, to May 15, 1929. This was authorized under an Order in Council which provided for the issue of a supply order of stated value redeemable at any trading establishment to those Indians who turned in beaver pelts to the department. An item has been placed in the estimates to cover the amount involved and it is anticipated that the department will be reimbursed through the revenue to be derived from the sale of the pelts.

It would appear that the beaver is in need of protection for a few years as that animal is now practically extinct in districts where formerly it was plentiful. There has been a close season on beaver in the Wood Buffalo park for the past few years in consonance with the close season of the province of Alberta. Departmental wardens report that many streams within the park have been re-stocked and new beaver dams have been observed. The beaver is very prolific and quickly responds to protection.

Muskrats.—The number of muskrats traded increased from 130,273 to 154,648. The mild weather experienced during the fall furnished excellent conditions for muskrat hunting and may, it is thought, be the chief reason for the increase in the number taken.

Wolves and Coyotes.—The measures adopted by the department to encourage the white and native population to destroy predatory animals continue to bring satisfactory results. The number of wolf pelts on which bounty was paid (at $30 per wolf, the pelt being turned in to the department) was 1,040 and an additional 379 pelts were sold to traders. The coyote, which was unknown in the Territories a few years ago, is now found in most districts. The following statement which indicates the number of wolves and coyotes secured during the past eight years is of interest:—

—	1921–2	1922–3	1923–4	1924–5	1925–6	1926–7	1927–8	1928–9
Wolves	315	271	460	637	847	923	1,282	1,419
Coyotes	nil	3	27	7	57	90	214	377

It will be noted that the number of coyotes taken during the licence year 1928-29 is larger than the number of wolves taken during 1921-22, at which time a bounty of $20 was paid for each wolf killed. No bounty was paid to encourage the destruction of coyotes; therefore, the number taken by hunters and trappers during the past year indicates that these animals have become a serious menace to the more useful forms of wild life. This is confirmed by natives and trappers, who have reported that valuable fur bearers taken in traps have been destroyed by coyotes.

The regulations have been amended to provide for the payment of a bounty of $15 for each coyote killed after June 30, 1929, conditional upon the pelt being surrendered to the department. It is hoped that the payment of this bounty will be an inducement to persons residing in the Territories to hunt these predatory animals with a view to reducing their numbers so materially that every useful form of wild life will benefit.

Revenue.—The revenue collected under the Northwest Game Act was as follows:—

Hunting licences	$ 16,127 00
Trading licences	6,588 67
Bird licences	25 00
Sale of wolf pelts	28,338 87
Fines for violation of the Northwest Game Act	60 00
Sale of confiscated pelts	1 50
Total	$ 51,141 04

This is an increase of $7,659.08 over the amount received during the previous licence year.

Licences.—Returns of licences under the Northwest Game Act for the year 1927-28 were received during the fiscal year 1928-29 as follows:—

Hunting.—Resident, 315; non-resident, British, 156; non-resident, alien, 39.

Trading.—Resident, 156; non-resident, British, 39; non-resident, alien, 3.

Bird Licences—5.

The revenue received in payment for these licences was $22,740.67, an increase of $3,288.67 over the amount received last year.

Convictions.—There were six convictions for violation of the Northwest Game Act as compared with ten last year.

Permits.—Fifteen permits were issued without charge to scientists and others to take specimens of game for scientific and propagation purposes. Twelve migratory bird permits were countersigned to be operative in the Northwest Territories.

AMENDMENTS TO THE NORTHWEST GAME REGULATIONS

Amendments have been made to the Northwest game regulations during the fiscal year for the following purposes:—

(1) To permit the natives to take a limited number of beaver during the present close season.
(2) To enlarge the Arctic Islands preserve by adding to it the areas formerly known as the Banks Island and Victoria Island preserves.
(3) To withdraw the settlement of Resolution and territory adjacent thereto from the Slave River preserve.
(4) To authorize the payment of a bounty of $15 for each coyote killed in the Northwest Territories after June 30, 1929, conditional upon the pelt being surrendered to the Crown.

STATEMENT of Game and Fur-Bearing Animals Taken and of Pelts Traded under Northwest Game Licences, 1927-28

——	Taken	Traded
Fur-bearers—		
Bear, black	41	211
" grizzly	5	1
" white	67	384
" not specified	5	21
Beaver	2,289	7,287
Coyote	182	377
Ermine	2,477	8,535
Fisher	58	72
Fox, blue	26	215
" cross	375	1,049
" red	798	2,402
" silver	65	139
" white	2,310	21,141
" not specified	7	13
Lynx	936	2,621
Marten	1,069	7,743
Mink	1,113	3,630
Muskrat	33,599	154,648
Otter	88	229
Skunk	103	35
Wolf	378	379
Wolverine	165	272
Big Game—		
Caribou	1,111	926
Moose	111	17
Mountain sheep	1	5
Protected Birds—		
Duck	608	
Grouse	223	
Ptarmigan	653	
Prairie Chicken	25	
Wild goose	42	

The total value of furs traded is estimated at approximately $2,000,968

YUKON

A proportion of the work done in some of the administrative divisions of this branch cannot be definitely divided as between the Northwest Territories and Yukon and the general paragraphs under the heading *Northwest Territories* should be read as applying to Yukon also.

Lands.—Twelve applications for land were received and six patents issued.

Timber.—The details of the timber business for the fiscal year were as follows:—

Permits to cut wood and timber	92
Timber cut under permit	111,540 feet board measure
Wood cut under permit	13,345 cords
Wood cut on timber berths on which dues were paid	40,625 feet board measure
Wood cut without authority of permit on which seizure dues were paid	107½ cords
Number of cords of wood cut on timber berths on which dues were paid	3,150½ cords

Coal.—The Five Fingers Coal Company operated their mine during the year and shipped a considerable tonnage to Dawson.

Agriculture.—The season was favourable and resulted in well-matured crops of an excellent quality.

Hospitals and Public Health.—The health of the residents of the Territory has been excellent. The hospitals at Dawson, Whitehorse, and Mayo have given efficient service.

Education.—The school situation is about the same as last year, public and high schools being maintained at Dawson, Whitehorse, Mayo, and Keno. An assisted school was maintained at Carcross, and a request has been received for an assisted school at Tagish.

Game.—Big game is reported as plentiful. Several parties of big game hunters were in the Territory again last year and expressed themselves as being highly satisfied with the results of their hunts.

Law and Order.—The Royal Canadian Mounted Police made frequent patrols to the outlying districts, and law and order has been well maintained throughout the Territory.

Yukon Council.—The Yukon Council was in session from June 5 to June 15, 1928. Certain amendments were made to the existing ordinances, but no new legislation of any importance was introduced.

The three-year term having expired, an election was held on August 29, 1928, and the following were elected as members of Council for the ensuing three years: W. L. Phelps, Whitehorse District; Frank Carscallen, Mayo District; and A. T. Taddie, Dawson District.

VII

SURVEYS BUREAU

REPORT OF THE DIRECTOR GENERAL OF SURVEYS, J. D. CRAIG

The several branches and divisions constituting the Surveys Bureau, namely, the Geodetic Survey, the Topographical Survey, the International Boundary Commission, and the Divisions of Aerial Surveys and Town Planning, coordinate all survey work of the Department.

The Director General of Surveys, as chairman of the Geographic Board, has had general supervision of the office of the board, the functions of which are to decide upon all questions submitted concerning geographic names in the Dominion, which arise in the departments of the public service.

The Geodetic Survey continued its work of determining with extreme accuracy the geographic positions and elevations of selected points throughout the country and of supplying this information to other government departments, engineers, and the general public.

During the year a method of making the reconnaissance for triangulation by aeroplane was successfully developed and it is anticipated that this will greatly reduce the time and cost of such work. Plans were also made for transporting one group of field parties during the season by aeroplane.

The development of the National Topographic Series of maps was proceeded with by the Topographical Survey and very substantial progress was made, due to the wider adoption of aerial methods. Six very important areas in western Ontario and in Manitoba lying away from means of transportation, but situated in important mineral districts, were mapped. The sheets were Armstrong, Norway House, St. Joseph, Berens River, Kenora, and Kississing. Each of these sheets includes an area in excess of 6,000 square miles, and each of the intricate mazes of lakes and watercourses studded with islands was shown in its proper place, thus enabling the prospector to travel through the country with a minimum of time and enabling the mining recorder to accurately locate the claims staked. Much confusion of location is thus avoided.

The usual land surveys were carried on on Dominion lands, and land classification investigations were made in the forest reserves in Manitoba and Saskatchewan.

The work of the Physical Testing Laboratory of the Topographical Survey Branch has been greatly advanced and has made some valuable contributions to the testing of aeronautical and other instruments at low temperatures.

A brief summary of the work of each of the three major divisions of the Surveys Bureau for the fiscal year follows. A separate report is available covering the activities of the various branches and divisions of the Surveys Bureau, including detailed reports of the work of the International Boundary Commission, the Topographical Survey and the Geodetic Survey, these two latter reports being also obtainable as separate publications.

The Geodetic Survey of Canada

The Geodetic Survey of Canada furnished, as in previous years, accurately determined geographical positions and precise elevations of points throughout the country for the basic control of all Canadian mapping operations and for the use of the engineering profession.

Primary and secondary triangulation nets were extended, base lines were measured, Laplace stations combining observations for latitude, longitude and azimuth were established, base-line and precise traverse tapes were standardized, useful data for investigating the theory of isostasy were obtained, and precise levelling, both first and second order, was carried on.

In the office the adjustment of triangulation, precise levelling, and precise traverse has progressed satisfactorily. Eight publications were printed for distribution.

Special research work determining the reliability of precise traverses as a means of extending geodetic control over long distances was completed.

Triangulation and Precise Traverse.—Successful experiments in reconnaissance from planes were carried out and the technique of the operation is now well developed. Plans have been laid for continuing these experiments and for transporting one group of parties by plane into northern Quebec during the 1929 season.

The aeroplane appears likely to become a very important vehicle for triangulation reconnaissance and the transportation of triangulation parties in undeveloped country well provided with lakes.

Triangulation was completed along the Matapedia valley and partly finished from the bay of Chaleur across the northern and western parts of New Brunswick. With the completion of this work in 1929 it is expected that no further primary triangulation will be necessary in the Maritime Provinces.

The triangulation through the Rouyn mining district begun in 1928 was finished and good progress made on the net eastward along the transcontinental line of the Canadian National Railways and southward along the meridian of Ottawa following the Gatineau River valley to the Capital.

In Ontario a net was laid out through the Kamiscotia and Timmins mining area, and considerable work was done in the Sudbury mining district, also around lake Abitibi. Work was begun on a precise traverse in the Cochrane area, which will be continued in 1929 towards James bay and also west from Cochrane along the Canadian National railway.

In the Prairie Provinces triangulation operations were begun at a point fifty miles south of Edmonton and, after being continued north to that city, were carried east through Prince Albert to Melfort. This net will be continued in 1929 northward from Prince Albert through the Prince Albert national park and on to the Rottenstone Lake mining area.

In British Columbia triangulation was continued east from Smithers to Prince George, and thence south to Quesnel. This net is part of a loop which will be carried, from Quesnel down the Fraser River valley to Vancouver.

In northern Ontario and northern Quebec, the progress during 1928 was the best ever attained, due in large measure to new types of light theodolites with which all parties were equipped.

Levelling.—The field operations of this division of the Geodetic Survey were about equally divided between precise levelling, mostly along railway lines, and secondary levelling along highways. The work along the Pacific Great Eastern railway in British Columbia was completed. In Quebec and Ontario a line of precise levels was run along the valley of the Ottawa river from Ottawa to Pembroke. This was extended, as secondary levelling, along the Pembroke-North Bay highway. Secondary levelling was also carried along the "Blue Water" highway from Sarnia to Midland, Ont., a branch line to Tobermory, at the extremity of the Bruce peninsula being included.

In addition to the above levelling operations, fifteen fundamental bench marks were constructed, all but one of these being in the provinces of Alberta

and Saskatchewan. More than 2,000 precise level bench marks in Western Canada were inspected prior to the preparation of publications giving their descriptions and elevations.

Geodetic Research.—Several problems arising from the use of precise traverse as a means of survey control in Canada have been studied and satisfactorily solved.

The solution of these problems was particularly urgent in view of extensive precise traverse surveys recently carried on in British Columbia and northern Ontario.

The treatise *The Conversion of Latitudes and Departures of a Traverse to Geodetic Differences of Latitude and Longitude* has been distributed. A new treatise *The Simultaneous Adjustment of Precise Traverse and Triangulation Nets* has been prepared for publication.

Triangulation Adjustment.—The several triangulation nets east of Montreal, extending through the Maritime Provinces have received special attention and each net has now been adjusted in its entirety, and at the same time results of the whole area have been harmonized. Statistical data have been supplied to federal and provincial survey bureaus as requested. A report on triangulation in the Bay of Fundy area, with an extension from Truro to Halifax, thence to Liverpool, Nova Scotia, has been prepared in manuscript form and is now ready for publication.

Precise Levelling Adjustment.—Adjusted values were obtained of all junction points of the Precise Level Net of Canada. From these values the adjusted elevations of all bench marks on connecting lines of levels were obtained. Orthometric elevation was taken into account in determining final elevations in the great lakes area.

Standards and Base Lines.—The Geodetic Survey made observations for the determination of latitude and longitude at eighteen stations, at six of which azimuth was also observed.

Standards of length were compared and the invar tapes used on base line and precise traverse measurement were standardized by refined and systematic reference to the nickel metre bar obtained in 1913. A base line was measured near Senneterre, Quebec, which will control the scale of the Northern Quebec triangulation.

Isostasy.—This service has co-operated with scientific bodies in this and other countries in procuring information as to the discrepancies between astronomical and geodetic values of longitude and latitude caused by mountains and varying densities in the earth's crust. This co-ordinated isostatic research has made available a vast amount of information at a minimum of expense.

Topographical Survey

The following is a brief summary of the work accomplished during the year:—

Field work was carried on in all the provinces of Canada, in Yukon Territory, and in the Northwest Territories. Eighteen parties were employed, and in addition five Dominion land surveyors acted as navigational officers for the planes of the Royal Canadian Air Force in taking pictures for aerial mapping operations.

Topographical Surveys.—One of the most important factors in the development of the resources of any country is an accurate knowledge of its physical features. While everyone realizes the necessity of having well defined legal boundaries of property in city or country, not so many realize the value of

maps showing topography. For the intelligent administration of natural resources, such maps are of vital importance. To the engineer, the forester, the geologist, the miner, and many others, these maps are of the greatest utility. On them much information of a scientific or a commercial nature, which would be difficult to show in any other way, can be plotted quickly and accurately.

The methods of preparing a topographical map vary greatly according to the nature of the area to be surveyed. In open districts where there is not too much relief and where the development warrants it, the plane-table is the instrument most frequently used, after a suitable control has been established. In many areas aeroplane photographs, either vertical or oblique, may be used to supplement other surveys. In mountainous areas the special method of photo-topography has been adapted to produce economically topographical maps.

New mapping completed, during the season, covered an area of 14,153 square miles as shown below:—

	Square miles
Nova Scotia (field interpretation of photographs)	1,720
New Brunswick	395
Quebec (including 580 square miles of the St. Lawrence river)	1,280
Saskatchewan	4,325
Alberta	5,808
British Columbia	625
	14,153

Control Surveys.—Surveys as a basis for topographic mapping were carried on in southwestern Nova Scotia; in the Moncton area in New Brunswick; in the St. Anne de Beaupre area, in the Upper Batiscan and St. Maurice districts, and the district northwest of Ottawa in Quebec. The Ontario Department of Lands and Forests conducted surveys in the district between Muskoka and lake Nipissing in co-operation with this organization. Permanent monuments to be used as reference points to which other surveys may be tied were established in suitable locations about three miles apart, on all these surveys. The geographical co-ordinates of these monuments are computed and this information is made available to the provincial authorities.

Astronomical observations were taken for position to provide additional control necessary for mapping in the Lac la Ronge district. Some survey work was conducted in the Wood Buffalo park in the Northwest Territories.

Aerial Surveys.—During the year a total of 65,200 square miles was photographed in co-operation with the Royal Canadian Air Force. Of this area 52 per cent or 33,800 square miles were covered by oblique, and 48 per cent or 31,400 square miles by vertical axis photography.

Over 92,000 aerial photographs were obtained from the different air bases and placed in the index. In addition 90,500 prints were received for various uses, such as: for transmission to other federal services, for constructing mosaic maps, for surveyors' uses in the field, or for distribution on a repayment basis to provincial government officials, city engineers, mining and lumbering corporations, municipalities, etc.

From the photographs obtained for mapping purposes, fifteen different mosaic maps have been constructed.

From vertical photographs eleven sheets on the two-mile scale, and from oblique photographs ten sheets on the four-mile scale, all of the National Topographic Series, are under preparation.

Vertical photographs have also been taken over portions of areas covered by 7 two-mile sheets of the National Topographic Series, the preparation of which will be undertaken as the photographing of the remaining portions are

later completed. On the areas covered by 2 other two-mile sheets the vertical photography has been completed and the preparation of these sheets will be commenced shortly.

The following sheets of the National Topographic Series, on the four-mile scale were completed from oblique aerial photographs and published during the year: Armstrong 52 I; Lake St. Joseph 52 O; Berens River 63 A; Norway House 63 H; Kenora 52 E; Kississing 63 N.

As in the previous year, special maps showing timbered areas were prepared for the use of the Dominion Forest Service. These took in areas covered by 3, and portions of 2 other four-mile sheets of the National Topographic series lying northwest of lake Winnipeg. Special copies of these enlarged to the one-half mile and two-mile scales were supplied the Forest Service, for use in their examination of these areas.

Special mapping was done in the Gatineau and Lievre areas. The results of this work will eventually appear upon 2 two-mile sheets of the National Topographic Series. Advance copies of the information on the one-mile scale have already been issued.

An area of 2,200 square miles in the vicinity of lac Seul was vertically photographed. Prints of the negatives obtained were used in the field by officials of the Ontario and Dominion government services who were engaged in the examination and determination of the areas to be flooded by raising the water level of this lake for storage purposes. The location of the contour line marking the proposed high water level was indicated on the prints in the field, and this information was shown on the maps—scale one-half mile to an inch—compiled therefrom covering the storage area.

Land Surveys.—One townsite was laid out at Medstead, Sask., a summer resort at Clear lake in the Riding Mountain forest reserve, and a settlement on Birch river west of The Pas.

Lands left dry by the Waterhen drainage project in township 44, range 21, west of the second meridian, were surveyed and a few sections in township 42, range 25, west of the Principal meridian, urgently required for settlement were laid out; Whitefox river where it forms the boundary of Fort a la Corne forest reserve (100 miles) was traversed; four timber berths and sixteen Indian reserves in British Columbia were surveyed; one hundred and twenty-five monuments in the municipality of Woodworth, Man., were restored by planting reinforced concrete posts and small miscellaneous surveys and investigations were made in one hundred and forty-six other places.

Land Classification Surveys.—These provide useful information relative to land and general resources, and the information recorded during the field examination includes factors closely allied to the systematic grading of the investigated lands as well as other matters affecting their future development as farm units. The compiled and published information made available to interested parties, comprised a township development plan, a report for each township, a land classification map and a map of the main soil types. During the last field season one party was so engaged within various areas in the provinces of Manitoba and Saskatchewan covering a total of 503,360 acres. In the province of Manitoba the investigated areas comprised 142,240 acres, and in the total of 361,120 acres investigated in the province of Saskatchewan 199,680 acres comprised lands within forest reserves and 161,440 acres were lands adjacent to reserves.

Quantity Production of Maps.—All surveys after being compiled into a form suitable for the preparation of maps are drafted, photographed and printed in colours on lithographic presses in quantities sufficient for distribu-

tion. Advance copies or copies of definite scales for plotting are made in the form of photographic prints. Maps of important urban centres or of areas of special interest are built up in relief.

Editions of seventy-nine maps and sixty-seven editions of township plans were printed and thirty relief maps were made.

Physical Testing Laboratory.—Some years ago the Bureau of Standards at Washington verified a one-metre standard rule for the Physical Testing Laboratory and the results were not concordant. Since that time investigations have been made and improved apparatus has been installed at both Washington and Ottawa, and it was considered that an effort should be made to trace the discrepancy. As observations made at the Physical Testing Laboratory did not throw any light on the subject, the Bureau of Standards arranged to send an observer and two standard rules to Ottawa for comparison with the laboratory standards. Subsequently two of these latter standards were taken to Washington and further tests carried out. There is now good agreement between lengths measured at both the institutions concerned, but the tests brought to light several interesting matters which are being further investigated.

The laboratory standards used in these tests had previously been studied at the National Physical Laboratory at London and the Bureau Internationale des Poids et Mesures, Sevres. It is intended to have them recompared at these two places during the summer of 1929.

A specially constructed refrigerator is being installed in the Physical Testing Laboratory for testing aeronautical and other instruments at very low temperatures. With the growth of winter flying and the advent of aerial photographic surveying under winter conditions there is an increased need for facilities for testing instruments at the temperatures met with in practice

Magnetic Declination Surveys.—During the year the Topographical Survey made some 1,000 measurements of the true direction of the compass needle in Canada in conjunction with its other work, and at very little expense as such measurements take but a few minutes when the surveyors are already on the ground with the instruments required. Such information is particularly valuable in such a large new country as Canada for the use of surveyors, airmen, navigators, explorers, miners, prospectors, timber cruisers, settlers, hunters, etc. The total number of such measurements made by the Topographical Survey since 1880 numbers more than 24,000.

This work was carried on in close co-operation with the Meteorological Service of Canada, the Dominion Observatory, the Ontario Department of Surveys, and various provincial governments and surveyors in order to utilize to the full the results of all work done. During 1928 the Ontario Department of Surveys made more than 300 such measurements in co-operation with the Topographical Survey.

In order that all this information may be shown in the most readily accessible and convenient form, it is published by the Topographical Survey in the form of declination charts on the map sheets of the National Topographic Series and Sectional Map Series, and every five years in the form of a magnetic declination chart of Canada.

Registration, Records and Distribution.—Survey returns received for examination from surveyors in the field, railway companies and provincial governments, and entered in the various registers, plotted on the various index maps, etc., comprised 474 books of field notes, 958 plans and 1,006 miscellaneous returns. During the year 505 new books and 835 new plans were placed on record, the total number of official record now being 20,474 books and 36,462 plans.

During the twelve months there were distributed 42,331 copies of the various maps, 5,722 publications and 8,998 official plans of townships, townsites, etc.

International Boundary Commission—Canadian Section

A conference of the Commissioners was held in Ottawa in May, 1928, when a division of the field work to be done during the following summer was agreed upon and certain matters of detail were discussed and the necessary decisions made. A second conference was held in Washington in December, 1928, when tentative plans for field work for the summer of 1929 were made and the boundary situations at Milltown, New Brunswick, and Cape Muzon, Dixon entrance, on the north Pacific coast were discussed.

As a result of the first conference, above referred to, the United States Section of the Commission undertook the work of reclearing the boundary vista, and repairing any monuments found to have deteriorated, on that section of the boundary between Northwest Angle inlet of lake of the Woods and Red river. The Canadian Section of the Commission undertook similar work on the southwest line of the Quebec-Maine Boundary, beginning at Estcourt, Quebec. By autumn 34 miles of vista were cut and 5 monuments repaired on this latter line. After completing the season's work on the southwest line, the Canadian party erected two monuments to mark the point where the boundary is crossed by a highway built recently between St. Zacharie, Quebec, and Rockwood, Maine, over which road is a considerable traffic of lumbermen, tourists, and others

In addition to the above the commissioners at their conference in May decided to award the contract for the erection of two boundary range marks at Point Roberts, British Columbia. The Department of Marine and Fisheries having undertaken the general supervision of this work at the request of the Commission, that department was authorized to appoint an inspector to supervise the actual work of construction of the marks, and the Commission appointed one of its own engineers of the United States Section to select sites for and determine the positions of the marks.

The purpose of these marks is to range the first course of the boundary in the waters of the strait of Georgia, in the interests of the fishing industry on both sides of the boundary. The work of construction was begun about the end of June, 1928, and was completed in September of that year. The outer range mark consists of a 65-foot steel tower with slat-work beacon, on a massive concrete pier. This mark is approximately one mile from shore. The shore mark consists of a 30-foot steel tower with similar slat-work beacon, erected on the top of the 150-foot bluff at point Roberts. It is intended during the fiscal year 1929-30, to install lights on these marks. The marks will then effectively range the first course of the water boundary in the strait of Georgia, a distance of 11 miles, by night as well as by day.

The engineer of the United States Section who determined the positions of the range marks was also in charge of a party which cleared the boundary vista across point Roberts and between Douglas and Huntingdon, B.C.

During this year the Canadian Commissioner secured the active co-operation of the Departments of National Revenue and Immigration at Ottawa, in keeping the Commission informed regarding the condition of the boundary demarcation. These departments instructed their officers at border ports of entry to report from time to time any information which they might become possessed of regarding the condition of the boundary demarcation, such as damaged or destroyed monuments, new roads crossing the boundary at unmarked

points, boundary vista obscured by new growth, or any other information which might be of value to the Commissioners in maintaining the boundary in a state of effective demarcation as required by the treaty of 1925.

During this year two conferences were held between members of the staff of the Commission, the first in Ottawa in May, the second in Washington in November. At these meetings a division of the work of computation for a joint report on the Ontario-Manitoba Section of the boundary was made, questions of detail were discussed and decided upon, and a draft of the text of the report was prepared.

Survey data, photographs, maps, and other information regarding the boundary were supplied to the Topographical Survey Branch, the Natural Resources Intelligence Service and the Dominion Water Power and Reclamation Service of the Department of the Interior; to the Geological Survey, the Department of State for External Affairs, the Department of Justice, the Department of Marine and Fisheries, the Department of National Revenue, and the Department of Immigration of the federal Government; the Quebec Streams Commission; the Department of the Attorney General, and the Department of Lands and Forests of the Province of Ontario; the Department of Lands of the Province of British Columbia; and to a large number of commercial corporations, engineers, and private persons.

During the year fourteen boundary maps were printed and signed by the Commissioners.

The office work of the staff during the year has been largely devoted to supplying the information above referred to and to adjusting survey data, computing geographic positions, preparing boundary maps, making triangulation sketches, and doing other related work in preparation of three joint reports, which have yet to be submitted to the Governments of Canada and the United States by the Commissioners.

DOMINION OF CANADA

REPORT OF THE DEPARTMENT

OF

IMMIGRATION AND COLONIZATION

FOR THE

FISCAL YEAR ENDED MARCH 31, 1929

OTTAWA
F. A. ACLAND
PRINTER TO THE KING'S MOST EXCELLENT MAJESTY
1930

To His Excellency the Right Honourable Viscount Willingdon, G.C.S.I., G.C.M.G., G.C.I.E., G.B.E., Governor General and Commander in Chief of the Dominion of Canada.

MAY IT PLEASE YOUR EXCELLENCY:

The undersigned has the honour to lay before Your Excellency the report of the transactions of the Department of Immigration and Colonization for the fiscal year ended March 31, 1929.

Respectfully submitted,

ROBERT FORKE,

Minister of Immigration and Colonization.

97045—1½

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REPORT

OF THE

DEPARTMENT OF IMMIGRATION AND COLONIZATION

1928-29

DEPUTY MINISTER, W. J. EGAN

This report of the activities of the department during the fiscal year 1928-29 is the twelfth annual report since the department was organized. Incorporated in this report will be found a number of statistical tables designed to supply most of the information of a statistical character that is asked for from time to time.

In the report of the Commissioner of Colonization will be found a summary of Empire Settlement work in its connection with British immigration. The report of the Director of Publicity deals with the efforts made by the Department to advertise Canada from an immigration point of view.

In this year's annual report there appears for the first time a report from the Commissioner of Immigration. This report takes the place of the Division Commissioners' reports which have appeared in recent years.

Those specially interested in the Women's Branch or in juvenile immigration, will find much useful information in the report of the Supervisor of the Women's Branch and that of the Supervisor of Juvenile immigration.

In former reports reference was made to changing conditions in Canada affecting and lessening the demand for immigrant labour. These conditions continue to change from year to year especially in the displacement of human labour by the introduction of labour-saving machinery. In Western Canada particularly it is noticeable how the crop is now put in and taken off without the demand for labour that was so insistent in former years. What is taking place in the farming industry is also evident in many other directions.

In August, 1928, 8,449 young men came to Canada under what was known as the Britisher harvester movement. These men travelled on a special rate arranged by the British Government and the transportation companies to which Canada was not a contributor. There was also a special arrangement for the return to the British Isles of those who did not want to remain in Canada. The recruiting of these men was done altogether too hurriedly and numbers were included in the movement who were sadly lacking both in industry and ability. About 2,000 remained in Canada, the balance having returned to their homes during the autumn and winter months. Of those returning 2,052 paid their way home out of wages earned in Canada, 1,776 paid part fare and the balance did not pay anything at all. As it could not be determined at time of entry how many of these men would remain in Canada and as all indicated intention to remain if satisfied, they were included in the Immigration returns. Allowance for the return movement must therefore be made in estimating the actual immigration for August, 1928.

At the close of last year the general subject of immigration, including the Immigration Act and Regulations and the work of the department, was under consideration by the Select Standing Committee on Agriculture and Colonization and a brief reference to this fact was made in the introductory note to annual report of last year.

The committee held thirty-six sittings and heard twenty-nine witnesses including officials of the Department of Immigration and Colonization, officials of the Department of Health, the Presidents of the Canadian National Railways and the Canadian Pacific Railway Company, the Directors of Colonization of both these railways. Representatives of various immigration societies and welfare organizations were also heard. The Minutes of Proceedings and Evidence and Report of the Committee which was subsequently issued by the King's Printer, covers a volume of more than 800 pages. The following is the report of the committee's conclusions and its recommendations:—

CONDITIONS UNDER WHICH CITIZENS OF VARIOUS COUNTRIES ARE ADMITTED TO CANADA

The committee is convinced that there is considerable misapprehension and lack of information regarding conditions on which persons from different parts of the world are admitted to Canada. In order to remove this misapprehension and to have a clear background on which to base any recommendation, the committee gives the following brief summary.

British—

1. All British subjects from the United Kingdom or from any of the British Dominions are eligible to enter Canada, provided they are sound mentally and physically and in a position to maintain themselves until employment can be secured.

No passport is required.

The passage rate for immigrants from the British Isles generally is $91.25.

2. British agricultural workers are specially encouraged by the establishment of a low rate of $9.73 at the instance of the Canadian Government.

3. British domestic workers are also provided for at the same rate as agricultural workers and in special cases even this small amount is advanced as a loan.

4. Families of British agricultural workers who have already emigrated to Canada are given the benefit of the special rate of $9.73 for adults and free passage to all children under seventeen. In this case, also, loans are made in special cases to provide for the transportation of such families.

5. British children over fourteen and under seventeen who are brought into Canada under the auspices of certain juvenile societies, have their passages paid; and an additional amount is paid to such societies to cover the railroad fares and incidental expenses of such children.

6. British boys over fourteen and under seventeen years of age, emigrating to Canada to approved farm homes, receive free passage to their destination.

Northern European Countries—(Norway, Sweden, Denmark, Finland, Germany, Switzerland, Holland, Belgium and France)

Any subjects or citizens of these countries are eligible for entry to Canada provided they are sound mentally and physically and are in a position to maintain themselves until employment can be secured.

These people are required to have passports.

The average minimum ocean rate is approximately $120.

No special rate or assistance of any kind is given by the Canadian Government to subjects or citizens of these countries.

Central and Southern European Countries—(Austria, Hungary, Poland, Roumania, Lithuania, Esthonia, Latvia, Bulgaria, Jugo-Slavia, Czecho-Slovakia)

Only agricultural workers, domestic servants or those within a prescribed degree of relationship to residents already legally admitted to Canada are permitted to come in from these countries. Special exceptions may be made in cases in which the Minister of Immigration is satisfied that their labour or service is required in Canada.

These people are required to have passports.

The average minimum ocean rate is approximately $135.

No special rate or assistance of any kind is given by the Canadian Government to subjects or citizens of these countries.

United States.

All citizens of the United States are eligible to emigrate to Canada provided they are sound mentally and physically and in a position to maintain themselves until employment can be secured.

No passport is required.

From the above it will be seen that emigrants from the United Kingdom stand in a specially favourable position as compared with emigrants from Continental countries, not only with regard to general passage rates but particularly with respect to the very greatly reduced rates given to agricultural and domestic workers from the United Kingdom.

For the further encouragement of British immigration the following schemes for land settlement should be noted:—

3,000 Family Scheme.

British families have been brought out to Canada at a special steamship rate, and are located by the Canadian Government on vacant soldier settlement lands. The British Government supplies to each such family a maximum of $1,500 cash for stock and equipment. All repayments are made by the settler for the price of the farm and for the stock and equipment loan, in equal yearly instalments, during a period of twenty-five years at the low interest rate of 5 per cent. The Canadian Government provides additional assistance by way of selection, settlement and supervision, free of charge.

British-Dominion-Provincial Land Settlement Scheme

Under this scheme the provincial Government provides the farm. The British Government supplies $1,500 for stock and equipment. The Canadian Government recruits the settler and provides settlement and supervision, free of charge, and, in addition, shares on a 50-50 basis any loss on account of stock and equipment. In the event of the default of a settler within the first two years the loss of interest on account of the purchase price of the land is shared on the following basis:—

	Per cent
Provincial Government	25
Dominion "	25
British "	50

This scheme has already been adopted by two of the provinces and negotiations are now being carried on with another province.

Training and Placement of British Boys in Farm Homes

Selected boys are given free passage from the United Kingdom to Canada, and institutions known as "training farms" are established by several provinces for receiving these British boys and distributing them among approved farm homes. The Dominion and provincial Governments each contribute $10 per boy towards the operation of the farm, and the British Government makes a grant of $20 for the same purpose.

Land Settlement for British Boys.

The object is to establish on farms of their own, British boys who have come to Canada, and who have acquired the necessary experience in farm work, and who have each saved $500. Under this scheme the British Government loans $1,250, the Dominion Government $1,000, the provincial Government $250 and these loans, with the boy's savings, aggregate $3,000 which is available for his settlement on the farm.

To indicate the importance of this work the British and Canadian Governments have entered into an agreement to spend $5,000,000 during the next ten years in making such loans.

As illustrating the special efforts put forward to encourage British immigration, the evidence shows that the Canadian Department of Immigration spends in this work $16.67 for each British immigrant as compared with an average cost of 11 cents per head for immigrants from the continental countries.

The committee heard evidence in detail respecting the organization of the department of Immigration and concerning all phases of its activities as carried on both separately and in conjunction with many governmental and voluntary organizations, and in relation thereto the committee makes the following recommendation and suggestions.

Federal Responsibility.

In the opinion of the committee the responsibility and control of the selection of immigrants, no matter by whom recruited must rest solely and exclusively with the Government of Canada.

Provincial Co-operation.

The committee recommends that special efforts be now made to extend the field of activity of the provincial authorities particularly in the matter of placement, settlement and supervision of immigrants, and that, with this in view, the federal Government consider contributing to defray the cost of provincial co-operation for that purpose.

Medical Examination

There have been complaints about the new system of medical inspection under which Canadian doctors conduct the medical examination of prospective immigrants in the United Kingdom. It appears that this new system was inaugurated as a result of representations made to the Department of Immigration by steamship companies, by provincial Governments, by the Dominion Council of Health, and by other social service organizations.

Several reasons were urged in favour of the change:

1. Great hardship was imposed on the immigrant who had been passed by the medical inspectors in the United Kingdom and then upon coming to Canada was subsequently rejected on arrival or after admission.

2. A large number of deportations have taken place on account of the mental or physical unfitness of those who had been passed as mentally and physically fit before leaving the United Kingdom.

3. The proportions of immigrants committed to mental institutions in Canada has been excessive.

The new system affords free medical examination of prospective immigrants by Canadian doctors before they take passage for Canada. Twenty-one Canadian doctors and forty-five roster doctors are conducting medical inspection in the British Isles, and there are 332 centres where medical examinations are conducted, and, in addition, special provisions are made for medical examination in isolated communities.

On the Continent there are seven Canadian doctors whose work is confined to examining all emigrants at the continental ports of embarkation. Previous to this examination by Canadian doctors the continental emigrant is subjected to a medical examination near his home under the auspices of the steamship company. Quarantine, fumigation and other precautions are exacted at the Continental ports of embarkation in addition to the medical examination by the Canadian doctor.

The suggestion was made that the volume of emigration from the British Isles to Canada was being reduced by the new medical arrangement, but the evidence shows that there has been a greater decrease in emigration from the British Isles to the other overseas dominions and to the United States.

The committee was impressed with the fact that the medical officers to whom is entrusted the medical examination of intending emigrants have a serious responsibility to Canada, not only to the federal Government but also to the provinces. It is their duty to ascertain that intending emigrants are physically and mentally fit to take their places and do their share as Canadian citizens. In this connection, and more particularly with regard to emigration from the Continent of Europe, the committee quotes the resolution passed by the Social Service Council of Canada at its meeting recently held in Montreal as follows:—

"The Social Service Council of Canada having in mind the burden now laid on the various provinces of Canada in providing for the idiots and the insane, and the unfortunate results of admission into this country of the moron and feeble minded, desires to urge upon the federal Government a continued and strict adherence to the provisions of the Immigration Act, in order that the door may not be open for the entrance of these types of prohibited undesirables."

Owing to the present arrangements a considerable amount of misunderstanding and dissatisfaction has arisen during the transition period. Certain objections were mentioned by witnesses, some of which have already been remedied. The present system of medical examination in the British Isles was inaugurated primarily for the benefit and protection of the British immigrant. The Department of Immigration and the Department of Health should, it is considered, make the most exhaustive efforts to see that the new system is perfected so as to eliminate, as far as possible, inconvenience, delay and expense to the prospective immigrant, and to dispel the idea that there is any intention, on the part of the Canadian Government, to restrict or hinder the coming to Canada of British subjects. For this purpose the committee recommends that the present system would be improved and that it would obviate delay and inconvenience to the prospective emigrant, especially those who reside in the rural districts of the British Isles if the examinations were made by British local doctors paid by, and under the supervision and control of, the Canadian medical authorities, who should be located at convenient centres of population.

SPECIAL PASSAGE RATES FOR BRITISH SETTLERS

1. *'Teen Age.*

The committee approves of all previous efforts to promote and encourage 'teen age immigration from Great Britain and recommends that the age limit for boy immigrants be extended to boys 14 to 19 years of age, both inclusive.

2. *Domestics.*

That the arrangements now in effect for the movement of domestics from the United Kingdom to Canada be continued.

3. *Family Re-union.*

That measures be taken to extend the assisted passage privileges to the families of immigrants from Great Britain who are now in Canada and who have so far established themselves as to have a reasonable prospect of being able to support their families in this country.

4. *Reduction in Ocean Rates for all British Immigrants.*

That measures be taken at an early date to arrange a conference between the federal and British Governments and the Atlantic steamship companies with the object of obtaining a reduction in ocean rates to British immigrants to approximately £10.

Railway Rates for Canadian Landseekers

The committee also recommends that measures be taken to ascertain whether the railways will restore the home seekers rates in effect prior to the war, making such rates effective East bound as well as West bound.

Land Settlement

1. The committee having heard the evidence in connection with the experiment of the 3,000 Family Settlement Scheme, now almost completed, recommends that time be given to test this form of land settlement before embarking upon extended schemes of this character.

2. The committee approves of the extension to other provinces of the tri-partite agreement with the British, federal and provincial Governments for the encouragement of land settlement by the British immigrant.

3. The committee recommends, subject to the completion of satisfactory arrangements with governments of the provinces, that assistance equal to that given by the British Government to British emigrant boys be extended by the government of Canada to the Canadian youth who are trained in agriculture.

Letters of Assurance of Employment. (*"Permits"—so called*)

Your committee recommends that letters of assurance of employment shall state the names, addresses, occupations and nationality of the persons to be admitted and that an annual return be made by the Minister of Immigration to Parliament within thirty days of its meeting, giving particulars of all such letters, showing the names of persons so admitted, their addresses, occupation and nationality, the names and addresses of the persons who made the application for each such admission and of any other person who endorsed or made favourable representations in support of such application.

RAILWAYS' CONTINENTAL AGREEMENT

There was in the evidence considerable criticism of certain features of the railways' agreement. The committee has some doubt as to the desirability of giving to the railways special authority to recruit immigrants, but as certain restrictions were imposed in connection with the renewal of the agreement in October, 1927, the committee is of the opinion that, in order to ascertain the results of its operation under the new conditions, the present agreement might be continued according to its terms, but with this exception—that the system of nominations of immigrants from non-preferred countries under the railways' agreement should be confined forthwith to the following degrees of relationship: father or mother, husband or wife, son or daughter, brother or sister—of any individual who is now engaged in farming in Canada, and further that the existing railways' agreement should not be renewed in its present form.

INCREASING EMPLOYMENT

Your committee would also recommend that the Government make an intensive and comprehensive study of the possibilities of increasing industrial and agricultural development in Canada with a view to attracting capital and providing wider and increased opportunities for employment not only for our own people, but for prospective immigrants.

The Annual Report of this Department does not contain the record of colonization work done by the Land Settlement Branch; particulars of that work will be found in the Annual Reports issued by the Soldier Settlement Board.

A movement not included in the immigration figures is that of returned Canadians. This information was collected and tabulated first in the fiscal year 1924-25. The movement year by year since the 1st April 1924 is as shown in the following table. It includes only those Canadian citizens who left Canada to reside in the United States and who on returning to Canada declared their intention of resuming their residence in Canada. Those who left Canada on visits have not been included in this summary. It will be observed that Canadian citizens are divided into three classes, *(a)* those born in Canada, *(b)* British born who acquired Canadian domicile, and *(c)* alien born people who secured naturalization in Canada.

—	Canadian born citizens	British subjects with Canadian domicile	Naturalized Canadians with domicile	Totals
Fiscal year 1924–25	36,473	4,487	2,815	43,775
" 1925–26	40,246	4,102	2,873	47,221
" 1926–27	49,255	5,326	2,376	56,957
" 1927–28	35,137	3,280	1,470	39,887
" 1928–29	30,008	2,795	995	33,798

TABLE 1.—Immigration to Canada, from 1881 to 1929

—		From British Isles	From United States	From Other Countries	Totals
Calendar year	1881	17,033	21,822	9,136	47,991
"	1882	41,283	58,372	12,803	112,458
"	1883	45,439	78,508	9,677	133,624
"	1884	31,787	65,886	6,151	103,824
"	1885	18,591	57,506	3,072	79,169
"	1886	23,507	40,650	4,995	69,152
"	1887	31,104	41,046	12,376	84,526
"	1888	30,852	44,952	12,962	88,766
"	1889	19,384	67,896	4,320	91,600
"	1890	21,793	50,336	2,938	75,067
"	1891	22,042	52,516	7,607	82,165
"	1892	22,636	.....	8,360	30,996
"	1893	20,071	.....	9,562	29,633
"	1894	16,004	.....	4,825	20,829
"	1895	14,956	.....	3,834	18,790
"	1896	12,384	.....	4,451	16,835
"	1897	11,383	2,412	7,921	21,716
"	1898	11,173	9,119	11,608	31,900
"	1899	10,660	11,945	21,938	44,543
Six months ended June 30,	1900	5,141	8,543	10,211	23,895
Fiscal year ended June 30,	1901	11,810	17,987	19,352	49,149
" "	1902	17,259	26,388	23,732	67,379
" "	1903	41,792	49,473	37,099	128,364
" "	1904	50,374	45,171	34,786	130,331
" "	1905	65,359	43,543	37,364	146,266
" "	1906	86,796	57,796	44,472	189,064
Nine months ended March 31,	1907	55,791	34,659	34,217	124,667
Fiscal year ended March 31,	1908	120,182	58,312	83,975	262.469
" "	1909	52,901	59,832	34,175	146,908
" "	1910	59,790	103,798	45,206	208,794
" "	1911	123,013	121,451	66,620	311,084
" "	1912	138,121	133,710	82,406	354,237
" "	1913	150,542	139,009	112,881	402,432
" "	1914	142,622	107,530	134,726	384,878
" "	1915	43,276	59,779	41,734	144,789
"	1916	8,664	36,937	2,936	48,537
" "	1917	8,282	61,389	5,703	75,374
" "	1918	3,178	71,314	4,582	79,074
" "	1919	9,914	40,715	7,073	57,702
" "	1920	59,603	49,656	8,077	117,336
" "	1921	74,262	48,059	26,156	148,477
" "	1922	39,020	29,345	21,634	89,999
" "	1923	34,508	22,007	16,372	72,887
" "	1924	72,919	20,521	55,120	148,560
" "	1925	53,178	15,818	42,366	111,362
" "	1926	37,569	18,778	39,717	96,064
" "	1927	50,378	21,025	72,588	143,991
" "	1928	51,552	25,007	75,038	151,597
" "	1929	59,497	30,560	77,665	167,722

TABLE 2.—Statement of Immigration to Canada for the Period July 1, 1900, to March 31, 1910

—	Fiscal Years										Totals
	1900–1901	1901–1902	1902–1903	1903–1904	1904–1905	1905–1906	Nine months ended March 31, 1907	1907–1908	1908–1909	1909–1910	
British—											
English	9,331	12,783	32,087	36,003	48,847	65,135	41,156	90,380	37,019	40,416	413,157
Irish	933	1,311	2,236	3,128	3,998	5,018	3,404	6,547	3,609	3,940	34,124
Scotch	1,476	2,853	7,046	10,552	11,744	15,846	10,729	22,223	11,810	14,706	108,985
Welsh	70	312	423	691	770	797	502	1,032	463	728	5,788
Total British	11,810	17,259	41,792	50,374	65,359	86,796	55,791	120,182	52,901	59,790	562,054
African, South	.....	.....	.....	21	35	46	23	76	53	97	351
Arabian	98	70	46	58	48	19	31	50	4	14	438
Armenian	62	112	113	81	78	82	208	563	79	75	1,453
Australian	3	11	46	58	204	322	185	180	171	203	1,383
Austro-Hungarian	5,692	8,557	13,095	11,137	10,089	10,170	4,045	21,376	10,798	9,757	104,716
Brazilian	.....	.....	.....	2	1	2	5	1	4	.....	15
Bulgarian	.....	1	7	14	2	71	179	2,529	56	557	3,416
Chinese	7	2	.....	.....	.....	18	92	1,884	1,887	2,156	6,046
Doukhobor	.....	12	.....	.....	24	204	.....	.....	.....	.....	240
Dutch	25	35	223	169	281	389	394	1,212	495	741	3,964
East Indian	.....	.....	.....	.....	45	387	2,124	2,623	6	10	5,195
Egyptian	1	3	1	3	2	18	10	8	2	2	50
Finnish	682	1,292	1,734	845	1,323	1,103	1,049	1,212	669	1,457	11,366
French and Belgian	492	654	1,240	2,392	2,539	2,754	1,964	3,885	2,658	2,637	21,215
German	984	1,048	1,887	2,985	2,759	1,796	1,903	2,377	1,340	1,533	18,612
Greek	81	161	193	191	98	254	545	1,053	192	452	3,220
Hebrew	2,765	1,015	2,066	3,727	7,715	7,127	6,584	7,712	1,636	3,182	43,529
Italian	4,710	3,828	3,371	4,445	3,473	7,959	5,114	11,212	4,228	7,118	55,458
Japanese	6	.....	.....	.....	354	1,922	2,042	7,601	495	271	12,691
Malay	.....	5	.....	.....	.....	.....	.....	.....	.....	.....	5
Maltese	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	2
Mennonite	.....	52	38	11	.....	.....	.....	.....	.....	.....	101
Negro	.....	.....	.....	.....	5	42	108	136	73	7	371
Newfoundland	.....	.....	335	519	190	340	1,029	3,374	2,108	3,372	11,267
New Zealand	.....	.....	2	23	57	89	30	70	65	82	418
Persian	.....	1	40	5	8	7	31	7	1	5	105
Polish	162	230	274	669	745	725	1,033	1,593	376	1,407	7,214
Portuguese	.....	.....	.....	.....	1	6	2	2	2	2	15
Roumanian	152	551	438	619	270	396	431	949	278	293	4,377
Russian	1,044	2,467	5,505	1,955	1,887	3,152	1,927	6,281	3,547	4,564	32,329
Scandinavian	1,750	2,451	5,448	4,203	4,118	3,859	2,296	4,073	2,082	3,782	34,062
Serbian	23	.....	2	10	7	19	4	48	31	76	220
Spanish	14	1	7	5	10	12	29	61	32	42	213
Swiss	30	17	73	128	150	172	112	195	129	211	1,217
Syrian	464	1,066	847	369	630	336	277	732	189	195	5,105
Turkish	37	17	43	29	30	357	232	489	236	517	1,987
U.S.A. Citizens, via ocean ports	68	73	.....	58	109	123	89	133	94	186	933
West Indian	.....	.....	23	55	77	194	90	278	159	203	1,079
Total Continental, etc.	19,352	23,732	37,099	34,786	37,364	44,472	34,217	83,975	34,175	45,206	394,378
From the United States	17,987	26,388	49,473	45,171	43,543	57,796	34,659	58,312	59,832	103,798	496,959
Total immigration	49,149	67,379	128,364	130,331	146,266	189,064	124,667	262,469	146,908	208,794	1,453,391

TABLE 3.—Statement of Immigration to Canada for the Period April 1, 1910, to March 31, 1920

—	Fiscal Years										Totals
	1910–1911	1911–1912	1912–1913	1913–1914	1914–1915	1915–1916	1916–1917	1917–1918	1918–1919	1919–1920	
British—											
English	84,707	95,107	108,082	102,122	30,807	5,857	5,174	2,477	7,954	45,173	487,460
Irish	6,877	8,327	9,706	9,585	3,525	818	958	174	336	2,751	43,057
Scotch	29,924	32,988	30,735	29,128	8,346	1,887	2,062	473	1,518	10,997	148,058
Welsh	1,505	1,699	2,019	1,787	598	102	88	54	106	682	8,640
Total British	123,013	138,121	150,542	142,622	43,276	8,664	8,282	3,178	9,914	59,603	687,215
African, South	86	144	22	56	23	11	1	4	.....	23	370
Albanian	.....	.....	.....	3	4	.....	.....	.....	.....	.....	7
Arabian	3	2	10	16	.....	.....	.....	.....	.....	.....	31
Argentinian	.....	.....	.....	2	5	.....	.....	.....	.....	2	9
Armenian	20	60	100	139	36	.....	3	2	.....	10	370
Australian	266	184	106	106	51	32	18	34	35	88	920
Austro-Hungarian	16,285	21,651	21,875	28,323	7,150	15	1	.....	2	8	95,310
Belgian	1,563	1,601	1,826	2,651	1,149	172	126	19	48	1,532	10,687
Brazilian	13	.....	.....	5	.....	2	.....	.....	.....	.....	20
Bulgarian	1,068	3,295	4,616	1,727	4,048	1	.....	.....	.....	1	14,756
Chinese	5,278	6,247	7,445	5,512	1,258	88	393	769	4,333	544	31,867
Cuban	.....	.....	.....	10	1	1	3	1	.....	2	18
Doukhobor	41	24	108	4	.....	.....	.....	.....	.....	.....	177
Dutch	931	1,077	1,524	1,506	605	186	151	94	59	154	6,287
East Indian	5	3	5	88	.....	1	.....	.....	.....	.....	102
Egyptian	3	.....	7	5	.....	.....	.....	.....	.....	.....	15
Finnish	2,132	1,646	2,391	3,183	459	139	249	113	2	44	10,358
French	2,041	2,094	2,755	2,683	1,206	180	199	114	222	1,584	13,078
German	2,533	4,664	4,953	5,537	2,472	27	9	1	1	12	20,209
Greek	777	693	1,390	1,102	1,147	145	258	45	4	39	5,600
Hebrew	5,146	5,322	7,387	11,252	3,107	65	136	32	22	116	32,585
Italian	8,359	7,590	16,601	24,722	6,228	388	758	189	49	1,165	66,049
Japanese	437	765	724	856	592	401	648	883	1,178	711	7,195
Macedonian	.....	.....	.....	17	132	.....	.....	.....	.....	.....	149
Maltese	.....	.....	128	402	19	4	109	144	2	405	1,213
Mexican	.....	3	9	9	.....	.....	.....	1	3	.....	25
Montenegrin	.....	.....	36	13	9	.....	1	.....	.....	.....	59
Negro	12	138	211	266	202	34	98	35	22	61	1,079
Newfoundland	2,229	2,598	1,036	496	338	255	1,243	1,199	512	443	10,349
New Zealand	116	61	39	24	21	18	12	13	15	31	350
Persian	19	19	20	19	7	3	.....	2	2	.....	91
Polish	2,177	5,060	9,945	9,793	1,976	8	12	.....	4	76	29,051
Portuguese	13	6	9	58	8	.....	1	1	.....	3	99
Roumanian	511	793	1,116	1,504	361	4	4	.....	.....	21	4,314
Russian	6,621	9,805	18,623	24,485	5,201	40	25	42	42	51	64,935
Scandinavian—											
Danish	535	628	798	871	326	167	145	74	44	233	3,821
Icelandic	250	205	231	292	145	15	9	3	12	11	1,173
Norwegian	2,169	1,692	1,832	1,647	788	232	303	235	91	179	9,168
Swedish	3,213	2,394	2,477	2,435	916	177	332	156	101	241	12,442
Serbian	50	209	366	193	220	6	1	.....	1	12	1,058
Spanish	197	191	296	1,138	755	11	76	28	12	15	2,719
Swiss	270	230	246	269	209	42	30	12	11	100	1,419
Syrian	124	144	232	278	79	3	9	2	.....	18	889
Turkish	469	632	770	187	33	.....	5	.....	.....	1	2,097
U.S.A. Citizens, via ocean ports	203	143	121	121	41	15	20	28	21	55	768
West Indian	455	393	495	719	389	47	315	307	223	66	3,409
Others	.....	.....	.....	2	18	1	.....	.....	.....	20	41
Total Continental, etc	66,620	82,406	112,881	134,726	41,734	2,936	5,703	4,582	7,073	8,077	466,738
From the United States	121,451	133,710	139,009	107,530	59,779	36,937	61,389	71,314	40,715	49,656	821,490
Total immigration	311,084	354,237	402,432	384,878	144,789	48,537	75,374	79,074	57,702	117,336	1,975,443

TABLE 4.—Statement of Immigration to Canada for the Period April 1, 1920, to March 31, 1925

	Fiscal years					Totals
	1920-1921	1921-1922	1922-1923	1923-1924	1924-1925	
British—						
English	47,687	23,225	19,188	37,030	26,466	153,596
Irish	6,384	3,572	3,668	9,719	9,379	32,722
Scotch	19,248	11,596	11,071	25,057	16,174	83,146
Welsh	943	627	581	1,113	1,159	4,423
Total British	74,262	39,020	34,508	72,919	53,178	273,887
African, South	63	32	41	60	87	283
Albanian	6	6	1	7	2	22
Arabian	8	5	2	.....	.....	15
Argentinian	4	.....	4	.....	.....	8
Armenian	85	70	59	486	304	1,004
Australian	90	76	67	112	162	507
Austrian	26	14	23	82	75	220
Belgian	1,645	503	316	1,662	1,300	5,426
Bermudian	8	2	7	4	4	25
Brazilian	.....	.....	.....	.....	1	1
Bulgarian	4	27	19	267	69	386
Chilian	.....	.....	.....	.....	3	3
Chinese	2,435	1,746	711	674	.....	5,566
Cuban	.....	.....	.....	1	.....	1
Czecho-Slovak	308	152	101	2,757	2,084	5,402
Dutch	595	183	119	1,149	1,637	3,683
East Indian	10	13	21	40	46	130
Egyptian	9	2	.....	3	3	17
Esthonian	.....	.....	12	51	49	112
Finnish	1,401	274	1,171	7,640	4,261	14,747
French	861	332	281	370	326	2,170
German	137	178	216	1,769	2,215	4,515
Greek	357	209	177	292	237	1,272
Hebrew	2,763	8,404	2,793	4,255	4,459	22,674
Hungarian	23	48	23	364	1,052	1,510
Italian	3,880	2,413	2,074	6,379	2,349	17,095
Jamaican	18	13	30	24	8	93
Japanese	532	471	369	448	501	2,321
Jugo-Slav	89	180	136	1,306	1,620	3,331
Latvian	.....	.....	1	11	20	32
Lettish	.....	.....	.....	6	2	8
Lithuanian	.....	19	106	236	125	486
Luxemburg	16	5	3	85	35	144
Maltese	140	34	57	148	26	405
Mexican	1	.....	.....	1	.....	2
Negro	144	42	42	42	39	309
Newfoundland	1,042	367	1,552	5,346	1,288	9,595
New Zealand	40	25	33	50	107	255
Persian	1	9	1	5	18	34
Polish	4,061	2,707	2,921	4,211	2,734	16,634
Portuguese	4	.....	2	.....	3	9
Roumanian	969	759	427	1,431	2,056	5,642
Russian	1,077	321	222	3,058	5,411	10,089
Scandinavian—						
Danish	511	541	382	1,355	1,830	4,619
Icelandic	50	31	21	27	49	178
Norwegian	429	480	507	2,424	2,550	6,390
Swedish	715	442	948	3,536	2,138	7,779
Spanish	202	6	15	39	3	265
Swiss	235	187	152	1,585	680	2,839
Syrian	443	123	91	286	210	1,153
Turkish	8	3	3	27	29	70
Ukrainian	491	89	36	832	26	1,474
U.S.A. Citizens, via ocean ports	110	67	32	134	96	439
Venezuelan	.....	.....	1	6	.....	7
West Indian	110	24	44	37	37	252
Total Continental, etc	26,156	21,634	16,372	55,120	42,366	161,648
From the United States	48,059	29,345	22,007	20,521	15,818	135,750
Total immigration	148,477	89,999	72,887	148,560	111,362	571,285

TABLE 5.—Statement of Immigration to Canada for the Period April 1, 1925, to March 31, 1929

	Fiscal years				Totals
	1925-1926	1926-1927	1927-1928	1928-1929	
British—					
English	19,689	24,890	25,991	30,355	100,925
Irish	5,993	9,187	8,756	9,199	33,135
Scotch	10,295	14,296	14,341	16,137	55,069
Welsh	1,053	1,411	1,784	3,189	7,437
Total British	37,030	49,784	50,872	58,880	196,566
Albanian	14	17	30	28	89
Arabian	10	4	6	1	21
Armenian	85	65	44	17	211
Belgian	1,063	2,080	2,171	1,222	6,536
Bohemian	8	22	7	8	45
Bulgarian	47	126	249	282	704
Chinese	.....	2	.....	.....	2
Croatian	1,006	1,085	902	990	3,983
Czech	805	721	714	846	3,086
Dalmatian	1	.....	.....	1	2
Dutch	1,180	1,674	1,928	1,599	6,381
East Indian	62	60	56	52	230
Esthonian	28	92	110	92	322
Finnish	1,617	5,180	4,765	3,651	15,213
French	498	548	868	745	2,659
German	7,431	12,941	12,638	13,215	46,225
Greek	217	3·0	583	736	1,876
Hebrew	3,587	4,471	4,296	3,301	15,655
Herzegovinian	.....	3	4	.....	7
Italian	1,638	3,301	3,593	792	9,324
Japanese	421	475	478	445	1,819
Jugo-Slav	1,604	2,084	1,450	2,824	7,962
Korean	.....	1	.....	.....	1
Lettish	24	60	77	74	235
Lithuanian	165	842	1,037	1,608	3,652
Magyar	4,112	4,863	5,318	6,242	20,535
Maltese	21	33	39	18	111
Mexican	.....	1	.....	.....	1
Montenegrin	.....	5	.....	.....	5
Moravian	6	36	33	4	79
Negro	53	51	88	96	288
Persian	11	6	4	1	22
Polish	2,535	6,505	6,733	8,269	24,042
Portuguese	3	14	7	12	36
Roumanian	265	292	237	284	1,078
Russian	925	1,127	948	908	3,908
Ruthenian	4,259	9,995	10,128	15,571	39,953
Scandinavian—					
Danish	1,112	2,030	3,835	3,311	10,288
Icelandic	53	30	28	24	135
Norwegian	1,072	3,384	4,327	2,434	11,217
Swedish	1,335	2,628	3,134	3,297	10,394
Serbian	454	885	411	390	2,140
Slovak	2,046	4,274	3,714	4,303	14,337
Spanish	12	29	28	18	87
Spanish American	.....	6	.....	3	9
Swiss	320	568	614	490	1,992
Syrian	134	218	82	75	509
Turkish	17	8	4	3	32
Total Continental, etc	40,256	73,182	75,718	78,282	267,438
From the United States	18,778	21,025	25,007	30,560	95,370
Total immigration	96,064	143,991	151,597	167,722	559,374

TABLE 6.—Statement of Immigration to Canada for the Fiscal Year ended March 31, 1929, Showing Sex, Occupation and Destination

—	Via Ocean Ports	From United States	Totals
Sex—			
Adult males	79,417	15,444	94,861
Adult females	33,020	7,342	40,362
Children under eighteen	24,725	7,774	32,499
Totals	137,162	30,560	167,722
Occupation—			
Farming class—			
Males	67,509	5,519	73,028
Females	4,796	1,313	6,109
Children	11,859	2,208	14,067
Labouring class—			
Males	3,860	2,181	6,041
Females	689	306	995
Children	1,214	357	1,571
Mechanics—			
Males	4,013	3,956	7,969
Females	1,272	757	2,029
Children	873	577	1,450
Trading class—			
Males	2,221	2,160	4,381
Females	964	848	1,812
Children	501	453	954
Mining class—			
Males	510	193	703
Females	86	30	116
Children	104	32	136
Female domestic servants	15,615	626	16,241
Other classes—			
Males	1,304	1,435	2,739
Females	9,598	3,462	13,060
Children	10,174	4,147	14,321
Destination—			
Nova Scotia	1,635	193	1,828
New Brunswick	1,588	518	2,106
Prince Edward Island	79	50	129
Quebec	14,074	4,585	18,659
Ontario	35,192	12,464	47,656
Manitoba	56,299	1,352	57,651
Saskatchewan	11,328	3,461	14,789
Alberta	10,926	5,317	16,243
British Columbia	6,036	2,591	8,627
Yukon Territory	3	22	25
Northwest Territories	1	.....	1
Not given	1	7	8

TABLE 7.—Summary for the Fiscal Year 1928-29

Via ocean ports—	
Quebec	74,653
Halifax	44,936
St. John	13,046
North Sydney	1,173
Vancouver	1,115
Victoria	422
Montreal	340
Sydney	15
New York	1,397
Boston	16
Other ports	49
Totals	137,162
Via border ports, from the United States	30,560
Total immigration	167,722

TABLE 8.—Statement of Immigration to Canada, for the Fiscal Year 1928-29, Showing Racial Origin and Sex

Origin	Ocean Ports				International Boundary				Grand totals
	Adult males	Adult females	Children under eighteen	Totals	Adult males	Adult females	Children under eighteen	Totals	
Albanian	20	5	3	28	3	1	3	7	35
Arabian	.....	.....	1	1	1	.....	.....	1	2
Armenian	2	10	5	17	7	1	2	10	27
Belgian	585	364	273	1,222	39	31	9	79	1,301
Bohemian	3	2	3	8	46	18	22	86	94
British—									
English	15,687	7,365	7,303	30,355	4,686	2,349	2,146	9,181	39,536
Irish	4,708	2,798	1,693	9,199	2,033	889	845	3,767	12,966
Scotch	7,450	5,032	3,655	16,137	1,837	828	788	3,453	19,590
Welsh	1,987	501	701	3,189	188	58	54	300	3,489
Bulgarian	220	43	19	282	1	1	.....	2	284
Croatian	780	110	100	990	9	6	9	24	1,014
Czech	651	106	89	846	4	.....	1	5	851
Dalmatian	.....	1	.....	1	.....	.....	.....	.....	1
Dutch	691	386	522	1,599	358	173	210	741	2,340
East Indian	3	25	24	52	1	.....	.....	1	53
Esthonian	44	42	6	92	.....	.....	.....	.....	92
Finnish	1,713	1,618	320	3,651	56	29	15	100	3,751
French	421	227	97	745	1,336	889	1,709	3,934	4,679
German	7,166	3,360	2,689	13,215	2,131	954	818	3,903	17,118
Greek	607	97	32	736	44	8	18	70	806
Hebrew	945	1,378	978	3,301	290	163	94	547	3,848
Italian	150	300	342	792	167	44	61	272	1,064
Japanese	121	214	110	445	1	.....	.....	1	446
Jugo-Slav	2,436	222	166	2,824	20	6	6	32	2,856
Lettish	41	25	8	74	3	.....	.....	3	77
Lithuanian	1,252	262	94	1,608	11	5	2	18	1,626
Magyar	4,179	1,077	986	6,242	42	25	39	106	6,348
Maltese	12	6	.....	18	1	.....	.....	1	19
Moravian	1	2	1	4	1	.....	.....	1	5
Negro	8	83	5	96	172	87	21	280	376
North American Indian	.....	.....	.....	.....	8	8	7	23	23
Persian	.....	1	.....	1	.....	.....	.....	.....	1
Polish	5,597	1,606	1,066	8,269	136	56	54	246	8,515
Portuguese	4	7	1	12	6	2	2	10	22
Roumanian	182	66	36	284	23	17	8	48	332
Russian	589	183	136	908	114	56	115	285	1,193
Ruthenian	11,239	2,810	1,522	15,571	22	8	9	39	15,610
Scandinavian—									
Danish	2,087	731	493	3,311	181	82	88	351	3,662
Icelandic	9	11	4	24	13	8	2	23	47
Norwegian	1,467	588	379	2,434	770	286	363	1,419	3,853
Swedish	2,376	571	350	3,297	520	179	175	874	4,171
Serbian	289	60	41	390	13	5	2	20	410
Slovak	3,328	574	401	4,303	20	8	12	40	4,343
Spanish	8	4	6	18	22	11	16	49	67
Spanish American	2	.....	1	3	2	1	1	4	7
Swiss	334	115	41	490	91	38	27	156	646
Syrian	23	29	23	75	13	12	19	44	119
Turkish	.....	3	.....	3	2	.....	2	4	7
Total immigration	79,417	33,020	24,725	137,162	15,444	7,342	7,774	30,560	167,722

TABLE 9.—Comparative Statement.—Immigration to Canada, via Ocean Ports, by Months, for the Fiscal Year 1928-29, compared with that of the preceding Fiscal Year

—	1927–28				1928–29			
	M.	F.	C.	Totals	M.	F.	C.	Totals
April	22,550	5,213	5,160	32,923	15,943	4,283	3,830	24,056
May	13,019	4,643	3,776	21,438	13,136	4,214	3,195	20,545
June	7,859	4,003	3,548	15,410	9,384	4,294	3,305	16,983
July	4,452	3,309	2,426	10,187	7,280	3,102	2,357	12,739
August	3,186	2,586	1,847	7,619	16,127	3,373	2,259	21,759
September	2,555	2,615	1,637	6,807	3,306	3,334	2,284	8,924
October	2,251	2,989	1,910	7,150	1,571	2,310	1,493	5,374
November	1,361	1,739	1,065	4,165	1,386	2,113	1,390	4,889
December	1,158	1,289	835	3,282	1,136	1,611	1,224	3,971
January	1,027	902	540	2,469	1,017	893	681	2,591
February	1,426	890	542	2,858	1,381	1,012	826	3,219
March	8,664	2,178	1,440	12,282	7,750	2,481	1,881	12,112
Totals	69,508	32,356	24,726	126,590	79,417	33,020	24,725	137,162

TABLE 10.—Comparative Statement.—Immigration from the United States to Canada, by Months, for the Fiscal Year 1928-29, compared with that of the preceding Fiscal Year.

—	1927–28				1928–29			
	M.	F.	C.	Totals	M.	F.	C.	Totals
April	1,338	569	611	2,518	1,518	642	767	2,927
May	1,302	602	599	2,503	1,626	707	763	3,096
June	1,259	681	702	2,642	1,530	810	980	3,320
July	1,060	529	512	2,101	1,502	751	791	3,044
August	1,480	588	555	2,623	1,968	784	829	3,581
September	1,114	542	598	2,254	1,308	693	738	2,739
October	1,136	572	575	2,283	1,236	689	742	2,667
November	825	434	480	1,739	936	503	516	1,955
December	612	342	330	1,284	796	383	365	1,544
January	652	320	251	1,223	900	386	287	1,573
February	697	378	379	1,454	726	365	324	1,415
March	1,221	545	617	2,383	1,398	629	672	2,699
Totals	12,696	6,102	6,209	25,007	15,444	7,342	7,774	30,560

TABLE 11.—Comparative Statement.—Total Immigration to Canada, by Months, for the Fiscal Year 1928-29, compared with that of the preceding Fiscal Year.

—	1927-28				1928-29			
	M.	F.	C.	Totals	M.	F.	C.	Totals
April	23,888	5,782	5,771	35,441	17,461	4,925	4,597	26,983
May	14,321	5,245	4,375	23,941	14,762	4,921	3,958	23,641
June	9,118	4,684	4,250	18,052	10,914	5,104	4,285	20,303
July	5,512	3,838	2,938	12,288	8,782	3,853	3,148	15,783
August	4,666	3,174	2,402	10,242	18,095	4,157	3,088	25,340
September	3,669	3,157	2,235	9,061	4,614	4,027	3,022	11,663
October	3,387	3,561	2,485	9,433	2,807	2,999	2,235	8,041
November	2,186	2,173	1,545	5,904	2,322	2,616	1,906	6,844
December	1,770	1,631	1,165	4,566	1,932	1,994	1,589	5,515
January	1,679	1,222	791	3,692	1,917	1,279	968	4,164
February	2,123	1,268	921	4,312	2,107	1,377	1,150	4,634
March	9,885	2,723	2,057	14,665	9,148	3,110	2,553	14,811
Totals	82,204	38,458	30,935	151,597	94,861	40,362	32,499	167,722

TABLE 12.—Statement of Immigration, via Ocean Ports, showing

Country of Birth	Totals	Bohemian	Moravian	Slovak	Hebrew	Arabian	English	Irish	Scotch	Welsh	Spanish American	Croatian	Dalmatian	Serbian	Belgian	Bulgarian	Czech	Finnish	French	German
Africa (British)	119	..	..	.....	8	..	74	2	18	1	....	....	....	....	.....	....	....	.....	...	6
Africa (Not British)	15	..	..	.....	1	..	5	1	2	.....	....	....	....	....	.....	....	....	.....	6	.....
Albania	31	..	..	.....	.....	..	.....	.....	.....	.....	....	....	....	....	.....	....	....	.....	...	.....
Argentine	18	..	..	.....	.....	..	12	.....	1	.....	1	....	....	....	.....	....	....	.....	1	.....
Armenia	2	..	..	.....	.....	..	.....	.....	.....	.....	....	....	....	....	.....	....	....	1	...	.....
Asia	33	..	..	.....	14	..	2	1	2	.....	....	....	....	....	.....	....	....	.....	...	.....
Australia	249	..	..	.....	.....	..	204	15	21	5	....	....	....	....	.....	....	....	.....	...	1
Austria	1,113	..	..	3	6	..	2	.....	.....	.....	1	3	....	....	.....	....	2	.....	...	1,089
Belgium	1,258	..	..	.....	.....	..	3	.....	.....	.....	....	....	....	....	1,181	....	...	.....	52	7
Brazil	14	..	..	.....	.....	..	4	.....	3	.....	....	....	....	....	.....	....	1	.....	1	2
Bulgaria	233	..	..	.....	.....	..	.....	.....	.....	.....	....	....	....	....	.....	229	...	.....	1	1
Canada	8	..	..	1	.....	..	1	.....	1	.....	....	....	....	....	.....	....	...	2	1	1
Central America	4	..	..	.....	.....	..	1	.....	2	.....	....	....	....	....	.....	....	....	.....	...	.....
Chili	10	..	..	.....	.....	..	2	.....	5	.....	....	....	....	....	.....	....	....	.....	1	1
China	63	..	..	.....	2	..	33	5	16	.....	....	....	....	....	.....	....	....	.....	...	.....
Czecho-Slovakia	7,165	3	4	4,231	7	..	1	.....	.....	.....	....	8	....	....	.....	....	768	.....	2	292
Denmark	3,308	..	..	.....	4	..	1	.....	1	.....	....	....	....	....	.....	....	...	3	1	34
England	27,791	..	..	.....	115	..	26,774	264	364	216	....	....	....	....	5	....	3	.....	9	6
Esthonia	109	..	..	.....	.....	..	.....	.....	.....	.....	....	....	....	....	.....	....	....	7	...	12
Finland	4,266	..	..	.....	.....	..	.....	.....	.....	.....	....	....	....	....	.....	....	....	3,600	...	3
France	648	..	..	.....	.....	..	12	.....	3	.....	....	1	....	....	20	....	1	.....	588	6
Germany	3,854	..	..	1	12	..	4	.....	.....	.....	....	....	....	....	.....	....	....	.....	1	3,781
Greece	778	..	..	.....	1	..	.....	.....	.....	.....	....	....	....	....	.....	52	...	.....	1	.....
Guiana (British)	29	..	..	.....	.....	..	14	.....	4	.....	....	....	....	....	.....	....	....	.....	...	.....
Holland	1,169	..	..	.....	.....	..	1	.....	.....	.....	....	....	....	....	5	....	...	.....	1	1
Honduras (British)	7	..	..	.....	.....	..	5	.....	.....	.....	....	....	....	....	.....	....	....	.....	1	.....
Hungary	5,177	..	..	4	12	..	1	.....	.....	.....	....	....	....	1	2	....	...	.....	...	411
Iceland	30	..	..	.....	.....	..	.....	.....	.....	.....	....	....	....	....	.....	....	....	.....	...	.....
India (British)	237	..	..	.....	1	..	139	15	21	6	....	....	....	....	.....	....	....	.....	...	1
Ireland	8,675	..	..	.....	7	..	198	8,377	89	3	....	....	....	....	.....	....	....	.....	...	1
Italy	763	..	..	.....	.....	..	2	.....	1	.....	....	....	....	....	.....	....	....	.....	1	3
Japan	454	..	..	.....	.....	..	6	.....	2	1	....	....	....	....	.....	....	....	.....	...	.....
Jugo-Slavia	5,300	..	..	27	.....	..	2	.....	.....	.....	....	976	1	203	.....	1	3	.....	...	1,144
Korea	3	..	..	.....	.....	..	.....	.....	3	.....	....	....	....	....	.....	....	....	.....	...	.....
Latvia	138	..	..	1	25	..	.....	.....	.....	.....	....	....	....	....	.....	....	....	.....	...	23
Lesser British Isles	153	..	..	.....	.....	..	131	2	19	1	....	....	....	....	.....	....	....	.....	...	.....
Lithuania	1,932	..	..	1	139	..	.....	.....	.....	.....	....	....	....	....	.....	....	....	1	...	195
Malta	34	..	..	.....	.....	..	8	.....	5	.....	....	....	....	....	.....	....	....	.....	...	1
Mexico	13	..	..	.....	.....	..	5	.....	.....	.....	....	....	....	....	.....	....	....	.....	...	8
Newfoundland	1,405	..	..	.....	.....	..	1,340	14	18	.....	....	....	....	....	.....	....	....	.....	26	.....
New Zealand	143	..	..	.....	.....	..	119	9	12	1	....	....	....	....	.....	....	....	.....	...	.....
Norway	2,429	..	..	.....	.....	..	.....	.....	.....	.....	....	....	....	....	1	....	....	6	...	1
Persia	4	..	..	.....	.....	..	.....	.....	.....	.....	....	....	....	....	.....	....	....	.....	...	.....
Poland	25,945	5	..	1	1,954	..	.....	.....	.....	.....	....	....	....	1	1	....	41	2	1	2,624
Portugal	4	..	..	.....	.....	..	.....	1	.....	.....	....	....	....	....	.....	....	....	.....	...	.....
Roumania	4,860	..	..	10	214	..	.....	.....	.....	.....	....	1	....	185	.....	....	1	.....	2	2,150
Russia	1,582	..	..	1	607	..	19	.....	.....	.....	....	....	....	....	.....	....	7	8	1	549
St. Pierre and Miquelon	4	..	..	.....	.....	..	.....	.....	.....	.....	....	....	....	....	.....	....	....	.....	4	.....
Scotland	16,173	..	..	.....	12	..	247	436	15,448	4	....	....	....	....	.....	....	....	.....	1	.....
South America	18	..	..	.....	.....	..	9	.....	6	.....	1	....	....	....	.....	....	....	.....	...	1
Spain	21	..	..	.....	.....	..	6	.....	2	.....	....	....	....	....	.....	....	....	.....	...	.....
Sweden	2,619	..	..	.....	4	..	1	.....	1	.....	....	....	....	....	.....	....	....	1	...	.....
Switzerland	638	..	..	.....	.....	..	3	.....	.....	1	....	....	....	....	.....	....	....	.....	27	135
Syria	56	..	..	.....	.....	1	.....	.....	.....	.....	....	....	....	....	.....	....	....	.....	...	.....
Turkey	32	..	..	.....	6	..	4	.....	1	.....	....	....	....	....	.....	....	....	.....	1	1
Ukraine	1,620	..	..	.....	145	..	.....	.....	.....	.....	....	....	....	....	.....	....	15	1	...	685
United States	378	..	..	22	5	..	105	20	35	3	....	1	....	....	5	....	4	19	...	15
Wales	3,782	..	..	.....	.....	..	773	35	21	2,947	....	....	....	....	.....	....	....	.....	...	2
West Indies (British)	158	..	..	.....	.....	..	57	2	6	.....	....	....	....	....	.....	....	....	.....	...	.....
West Indies (not British)	7	..	..	.....	.....	..	2	.....	.....	.....	....	....	....	....	.....	....	....	.....	1	2
Other European countries	37	..	..	.....	.....	..	3	.....	.....	.....	....	....	....	....	2	....	...	.....	12	20
Other Countries (British)	31	..	..	.....	.....	..	19	.....	3	.....	....	....	....	....	.....	....	....	.....	...	.....
Other countries (not British)	13	..	..	.....	.....	..	1	.....	1	.....	....	....	....	....	.....	....	....	.....	.1	.....
Totals	137,162	8	4	4,303	3,301	1	30,355	9,199	16,137	3,189	3	990	1	390	1,222	282	846	3,651	745	13,215

Country of Birth, by Racial Origin, for the Fiscal Year 1928-29

Greek	Dutch	Magyar	Italian	Jugo-Slav	Polish	Roumanian	Russian	Danish	Icelandic	Norwegian	Swedish	Swiss	Ruthenian	Albanian	Esthonian	Lettish	Lithuanian	Maltese	Portuguese	Spanish	Negro	Armenian	East Indian	Japanese	Persian	Syrian	Turkish
....	3	....	....	....	....	....	....	....	..	4	2	1	....	..	....	..	....	..	..	..	..	..	....	....	..	..	..
1	....	....	....	....	....	....	....	....	..	....	....	....	9	21	....	..	....	..	..	..	..	..	....	....	..	..	..
....	....	....	1	....	....	....	....	2	..	....	....	....	....	..	....	..	....	..	..	..	..	..	....	....	..	..	..
....	....	....	....	....	....	....	....	....	..	....	....	....	....	..	....	..	....	..	..	..	..	1	....	....	..	..	..
1	2	....	....	....	....	....	5	....	..	....	....	....	....	..	....	..	....	..	..	..	..	..	....	....	..	6	..
1	1	....	....	....	....	....	....	....	..	....	1	....	....	..	....	..	....	..	..	..	..	..	....	....	..	..	..
....	....	3	....	....	1	....	....	....	..	....	....	....	3	..	....	..	....	..	..	..	..	..	....	....	..	..	..
....	14	....	....	....	....	....	....	....	..	....	1	....	....	..	....	..	....	..	..	..	..	..	....	....	..	..	..
....	....	....	....	....	2	1	....	....	..	....	....	....	....	..	....	..	....	..	..	..	..	..	....	....	..	..	..
....	....	1	....	....	....	1	....	....	..	....	....	....	....	..	....	..	....	..	..	..	..	..	....	....	..	..	..
....	....	....	....	....	....	....	1	....	..	....	....	....	....	..	....	..	....	..	..	..	..	..	....	....	..	..	..
....	....	....	....	....	....	....	....	....	..	....	1	....	....	..	....	..	....	..	..	..	..	..	....	....	..	..	..
....	1	....	....	....	....	....	....	4	..	1	1	....	....	..	....	..	....	..	..	1	..	..	....	....	..	..	..
2	....	613	....	158	4	....	....	....	..	....	....	1	1,069	..	1	..	....	..	1	..	..	..	....	....	..	..	..
....	1	....	....	....	9	....	1	3,228	..	5	8	....	12	..	....	..	....	..	..	..	..	..	....	....	..	..	..
....	3	....	9	....	5	....	4	7	..	2	3	1	....	..	....	..	1	..	..	..	..	..	....	....	..	..	..
....	....	....	....	....	....	1	1	....	..	....	3	....	....	..	80	4	1	..	..	..	..	..	....	....	..	..	..
....	....	....	....	....	7	....	5	1	..	....	629	....	21	..	....	..	....	..	..	..	..	..	....	....	..	..	..
....	....	....	2	....	2	1	2	....	..	....	....	8	....	..	....	..	....	..	..	..	..	1	....	....	..	1	..
722	18	....	....	2	10	....	....	13	..	1	1	5	7	..	....	..	....	..	..	..	..	..	....	....	..	..	..
....	....	....	....	....	....	....	....	....	..	....	....	....	....	..	....	..	....	..	5	..	6	..	....	....	..	..	..
....	1,150	....	....	....	1	....	1	1	..	....	....	....	8	..	....	..	....	..	..	..	..	1	....	....	..	..	..
1	2	4,721	....	....	2	....	....	....	23	7	....	1	19	..	....	..	....	..	..	..	..	..	....	....	..	..	..
....	1	....	....	....	....	....	....	....	..	....	....	1	....	..	....	..	....	..	..	..	..	..	52	....	..	..	..
2	....	....	754	....	....	....	....	....	..	....	....	....	....	..	....	..	....	..	..	..	..	..	....	....	..	..	..
....	....	....	....	....	....	....	....	....	..	....	2	....	....	..	....	..	....	..	..	..	..	..	....	443	..	..	..
1	....	199	....	2,614	2	94	4	....	..	....	....	....	21	..	....	1	6	1	..	..	..	..	....	....	..	..	..
....	9	....	....	....	4	....	3	....	..	....	....	....	....	..	3	57	13	..	..	..	..	..	....	....	..	..	..
....	....	....	....	....	9	....	8	2	..	4	....	....	9	1	....	9	1,554	..	..	..	..	..	....	....	..	..	..
....	....	....	3	....	....	....	....	....	..	....	....	....	....	..	....	..	....	17	..	..	..	..	....	....	..	..	..
....	....	....	....	....	....	....	....	....	..	....	....	....	....	..	....	..	....	..	..	..	..	..	....	....	..	..	..
....	....	....	....	....	....	....	....	....	..	....	....	....	....	..	....	..	....	..	..	..	1	..	....	....	..	6	..
....	....	....	....	....	....	....	....	....	..	2	....	....	....	..	....	..	....	..	..	..	..	..	....	....	..	..	..
....	....	....	....	....	....	....	....	14	1	2,378	28	....	....	..	....	..	....	..	..	..	..	..	....	....	..	..	..
....	4	....	1	2	8,102	....	602	....	..	....	11	2	12,577	6	3	..	5	..	..	..	..	3	....	....	1	..	..
....	1	689	....	38	22	186	7	....	..	....	....	....	1,353	..	....	1	....	..	3	..	..	..	....	....	..	..	..
....	35	....	....	1	5	....	254	2	..	....	4	....	67	..	5	2	9	..	..	..	..	2	....	....	..	4	..
....	....	....	....	....	....	....	....	....	..	....	....	....	....	..	....	..	....	..	..	..	..	..	....	....	..	..	..
....	6	....	3	....	....	....	3	....	..	....	....	....	....	..	....	..	13	..	..	..	..	..	....	....	..	..	..
....	1	....	....	....	....	....	....	....	..	....	....	....	....	..	....	..	....	..	..	..	..	..	....	....	..	..	..
....	....	....	....	....	....	....	....	....	..	....	....	....	....	..	....	..	....	..	..	13	..	..	....	....	..	..	..
....	....	....	....	....	....	....	....	19	..	14	2,579	....	....	..	....	..	....	..	..	..	..	..	....	....	..	..	..
....	....	....	3	....	....	....	....	....	..	....	....	469	....	..	....	..	....	..	..	..	..	..	....	....	..	..	..
....	....	....	....	....	....	....	....	....	..	....	....	....	....	..	....	..	....	..	..	..	..	4	....	....	..	50	1
5	....	....	....	....	....	....	....	....	..	....	....	....	....	..	....	..	....	..	..	..	..	6	....	....	..	6	2
....	339	....	....	....	50	....	5	....	..	....	....	....	380	..	....	..	....	..	..	..	..	..	....	....	..	..	..
....	....	16	4	9	32	....	2	18	..	16	23	1	16	..	....	..	5	..	..	..	1	..	....	1	..	..	..
....	....	....	2	....	....	....	....	....	..	....	....	....	....	..	....	..	....	..	..	..	..	..	....	....	..	2	..
....	....	....	2	....	....	....	....	....	..	....	....	....	....	..	....	..	....	..	3	2	86	..	....	....	..	..	..
....	....	....	....	....	....	....	....	....	..	....	....	....	....	..	....	..	1	..	..	1	..	..	....	....	..	..	..
....	....	....	....	....	....	....	....	....	..	....	....	....	....	..	....	..	....	..	..	..	..	..	....	....	..	..	..
....	....	....	....	....	....	....	....	....	..	....	....	....	....	..	....	..	....	..	..	..	..	..	....	....	..	..	..
....	....	....	8	....	....	....	....	....	..	....	....	....	....	..	....	..	....	..	..	..	1	..	....	....	..	..	..
....	8	....	....	....	....	....	....	....	..	....	....	....	....	..	....	..	....	..	..	1	..	..	....	1	..	..	..
736	1,599	6,242	792	2,824	8,269	284	908	3,311	24	2,434	3,297	490	15,571	28	92	74	1,608	18	12	18	96	17	52	445	1	75	3

TABLE 13.—Statement of Immigration, from the United States, showing

Country of Birth	Totals	Bohemian	Moravian	Slovak	Hebrew	Arabian	English	Irish	Scotch	Welsh	North American Indian	Spanish American	Croatian	Serbian	Belgian	Bulgarian	Czech	Finnish
Africa (British)	12	....	....	....	....	....	6	1	1	....	.....	....	..	..	..	..	..	....
Africa (Not British)	2	....	....	....	....	....	.....	.....	.....	....	.....	....	..	..	..	..	..	....
Albania	4	....	....	....	....	....	.....	.....	.....	....	.....	....	..	..	..	..	..	....
Argentine	5	....	....	....	....	....	1	.....	.....	....	.....	....	..	..	..	..	..	....
Armenia	2	....	....	....	....	....	.....	.....	.....	....	.....	....	..	..	..	..	..	....
Asia	3	....	....	....	3	....	.....	.....	.....	....	.....	....	..	..	..	..	..	....
Australia	38	....	....	....	....	....	32	1	3	1	.....	....	..	..	..	..	..	....
Austria	109	....	....	2	17	....	.....	.....	.....	....	.....	....	4	1	..	..	1	....
Belgium	60	....	....	....	....	....	.....	.....	.....	....	.....	....	..	..	58	..	..	....
Brazil	6	....	....	....	....	....	.....	.....	2	....	.....	1	..	..	..	..	..	....
Bulgaria	2	....	....	....	....	....	.....	.....	.....	....	.....	....	..	..	..	2	..	....
Canada	1,195	....	....	....	10	....	324	149	184	8	1	....	..	..	..	..	..	3
Central America	1	....	....	....	....	....	.....	.....	.....	....	.....	....	..	..	..	..	..	....
Chili	3	....	....	....	....	....	1	.....	.....	....	.....	1	..	..	..	..	..	....
China	8	....	....	....	1	....	3	.....	.....	....	.....	....	..	..	..	..	..	....
Czecho-Slovakia	39	9	....	17	....	....	.....	.....	.....	....	.....	....	..	..	..	..	3	....
Denmark	113	....	....	....	....	....	.....	.....	.....	....	.....	....	..	..	..	..	..	....
England	1,684	....	....	....	20	....	1,607	12	19	8	.....	....	..	..	..	..	..	....
Finland	40	....	....	....	....	....	.....	.....	.....	....	.....	....	..	..	..	..	..	37
France	67	....	....	....	1	....	2	.....	1	....	.....	....	..	..	..	..	..	....
Germany	254	....	....	1	2	....	1	1	.....	....	.....	....	..	..	..	..	..	....
Greece	39	....	....	....	....	....	.....	.....	.....	....	.....	....	..	..	..	..	..	....
Guiana (British)	6	....	....	....	....	....	3	.....	2	....	.....	....	..	..	..	..	..	....
Holland	58	....	....	....	2	....	1	.....	.....	....	.....	....	..	..	..	..	..	....
Honduras (British)	2	....	....	....	....	....	.....	1	.....	....	.....	....	..	..	..	..	..	....
Hungary	61	1	....	1	5	....	.....	.....	.....	....	.....	....	..	1	..	..	..	....
Iceland	9	....	....	....	....	....	.....	.....	.....	....	.....	....	..	..	..	..	..	....
India (British)	10	....	....	....	....	....	8	1	.....	1	.....	....	..	..	..	..	..	....
Ireland	377	....	....	....	....	....	6	364	6	1	.....	....	..	..	..	..	..	....
Italy	95	....	....	....	....	....	.....	.....	.....	....	.....	....	..	..	..	..	..	....
Jugo-Slavia	29	....	....	1	1	....	1	.....	.....	....	.....	....	5	10	..	..	..	....
Latvia	5	....	....	....	2	....	.....	.....	.....	....	.....	....	..	..	..	..	..	....
Lesser British Isles	13	....	....	....	....	....	10	.....	1	....	.....	....	..	..	..	..	..	....
Lithuania	11	....	....	....	4	....	.....	.....	.....	....	.....	....	..	..	..	..	..	....
Malta	1	....	....	....	....	....	.....	.....	.....	....	.....	....	..	..	..	..	..	....
Mexico	12	....	....	....	....	....	4	.....	1	....	.....	....	..	..	..	..	..	....
Newfoundland	104	....	....	....	....	....	92	1	7	2	.....	....	..	..	..	..	..	....
New Zealand	14	....	....	....	....	....	7	3	3	....	.....	....	..	..	..	..	..	....
Norway	297	....	....	....	....	....	2	.....	3	....	.....	....	..	..	..	..	..	....
Poland	138	....	....	....	51	....	.....	.....	.....	....	.....	....	..	..	..	..	..	....
Portugal	1	....	....	....	....	....	.....	.....	.....	....	.....	....	..	..	..	..	..	....
Roumania	53	....	....	....	16	....	.....	.....	.....	....	.....	....	..	..	..	..	..	....
Russia	319	....	....	....	104	....	5	.....	.....	....	.....	....	..	..	..	..	..	....
St. Pierre and Miquelon	1	....	....	....	....	....	.....	.....	.....	....	.....	....	..	..	..	..	..	....
Scotland	869	....	....	....	1	....	21	17	823	1	.....	....	..	..	..	..	..	....
South America	4	....	....	....	....	....	1	.....	.....	....	.....	....	..	..	..	..	..	....
Spain	3	....	....	....	....	....	.....	.....	.....	....	.....	....	..	..	..	..	..	....
Sweden	271	1	....	....	1	....	2	.....	1	....	.....	....	..	..	..	..	..	....
Switzerland	54	....	....	....	....	....	2	.....	.....	....	.....	....	..	..	..	..	..	....
Syria	9	....	....	....	....	1	.....	.....	.....	....	.....	....	..	..	..	..	..	....
Turkey	13	....	....	....	2	....	1	.....	.....	....	.....	....	..	..	..	..	..	....
Ukraine	3	....	....	....	....	....	.....	.....	.....	....	.....	....	..	..	..	..	..	....
United States	23,918	75	1	18	304	....	6,997	3,211	2,392	231	22	....	15	8	21	..	1	60
Wales	64	....	....	....	....	....	15	1	1	47	.....	....	..	..	..	..	..	....
West Indies (British)	26	....	....	....	....	....	14	3	1	....	.....	....	..	..	..	..	..	....
West Indies (Not British)	11	....	....	....	....	....	5	1	.....	....	.....	1	..	..	..	..	..	....
Other European Countries	3	....	....	....	....	....	2	.....	.....	....	.....	....	..	..	..	..	..	....
Other Countries (British)	6	....	....	....	....	....	4	.....	2	....	.....	....	..	..	..	..	..	....
Other countries (Not British)	4	....	....	....	....	....	1	.....	.....	....	.....	1	..	..	..	..	..	....
Totals	30,560	86	1	40	547	1	9,181	3,767	3,453	300	23	4	24	20	79	2	5	100

Country of Birth, by Racial Origin, for the Fiscal Year 1928-29

French	German	Greek	Dutch	Magyar	Italian	Jugo-Slav	Polish	Roumanian	Russian	Danish	Icelandic	Norwegian	Swedish	Swiss	Ruthenian	Albanian	Lettish	Lithuanian	Maltese	Portuguese	Spanish	Negro	Armenian	East Indian	Japanese	Syrian	Turkish
2	.....	....	....	....	1	....	....	....	....	1	....	.....	....	....	....	....	....	....	....	....	1	1	....	....	....	....	....
.....	.....	....	....	....	....	....	....	....	....	....	....	.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
.....	1	....	....	....	....	....	....	....	....	1	....	1	....	1	....	4	....	....	....	....	....	....	....	....	....	....	....
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1	.....	....	....	....	....	....	....	....	....	....	....	.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
.....	58	....	....	....	1	1	9	1	1	....	....	.....	1	....	11	....	....	1	....	....	....	....	....	....	....	....	....
.....	.....	....	2	....	....	....	....	....	....	....	....	.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
.....	.....	....	....	....	1	....	....	....	....	1	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
404	70	....	14	1	2	....	3	....	2	1	2	8	2	2	....	....	....	....	....	....	....	4	....	....	....	1	....
.....	.....	....	1	....	....	....	....	....	....	....	....	.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
.....	1	....	....	....	....	....	....	....	....	....	....	.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
.....	.....	....	....	....	....	....	....	....	....	2	....	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
.....	5	....	....	4	....	1	....	....	....	....	....	.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
1	.....	....	2	....	....	....	....	....	....	108	....	.....	1	....	....	....	....	1	....	....	....	....	....	....	....	....	....
1	8	....	2	....	4	....	....	....	....	....	....	.....	2	....	....	....	....	1	....	....	....	....	....	....	....	....	....
.....	.....	....	....	....	....	....	....	....	1	....	....	.....	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....
55	1	....	....	1	3	....	1	....	....	....	....	.....	....	2	....	....	....	....	....	....	....	....	....	....	....	....	....
2	246	....	....	....	....	....	1	....	....	....	....	.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
.....	.....	39	....	....	....	....	....	....	....	....	....	.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
1	.....	....	....	....	....	....	....	....	....	....	....	.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
.....	.....	....	54	....	....	....	1	....	....	....	....	.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
.....	.....	....	....	....	....	....	....	....	....	....	....	.....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....
.....	6	....	....	40	....	2	....	4	....	....	....	.....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....
.....	.....	....	....	....	....	....	....	....	....	....	9	.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
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.....	.....	....	....	....	94	....	....	....	....	....	....	.....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....
.....	.....	....	....	3	....	6	....	2	....	....	....	.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
.....	1	....	....	....	....	....	....	....	....	....	....	.....	....	....	....	....	2	....	....	....	....	....	....	....	....	....	....
1	1	....	....	....	....	....	....	....	....	....	....	.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
.....	1	....	....	....	....	1	....	....	2	....	....	.....	....	....	....	....	....	3	....	....	....	....	....	....	....	....	....
.....	.....	....	....	....	....	....	....	....	....	....	....	.....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....
.....	1	....	2	....	....	....	....	....	2	....	....	1	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....
2	.....	....	....	....	....	....	....	....	....	....	....	.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
1	.....	....	....	....	....	....	....	....	....	....	....	.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
1	.....	....	....	....	....	....	....	....	....	....	....	288	2	....	....	....	....	1	....	....	....	....	....	....	....	....	....
.....	12	....	1	....	....	....	61	....	3	....	....	.....	....	....	9	....	....	1	....	....	....	....	....	....	....	....	....
1	.....	....	....	....	....	....	....	....	....	....	....	.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
.....	5	1	....	....	....	....	....	30	....	....	....	.....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....
.....	79	....	7	....	....	1	6	....	111	2	....	1	....	....	1	....	1	1	....	....	....	....	....	....	....	....	....
1	.....	....	....	....	....	....	....	....	....	....	....	.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
.....	1	....	1	....	....	....	....	....	1	....	....	1	1	....	....	....	....	1	....	....	....	....	....	....	....	....	....
.....	.....	....	2	....	....	....	....	....	1	....	....	.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
.....	.....	....	....	....	....	....	....	....	....	....	....	.....	....	....	....	....	....	....	....	....	3	....	....	....	....	....	....
.....	.....	....	....	....	....	....	....	....	....	1	....	1	264	....	....	....	....	....	....	....	....	....	....	....	....	....	....
3	5	....	....	....	....	....	....	....	....	....	....	.....	....	44	....	....	....	....	....	....	....	....	....	....	....	8	....
.....	.....	2	....	....	....	....	....	....	....	....	....	.....	....	....	....	....	....	....	....	....	....	....	5	....	....	1	2
3,456	3,401	28	652	57	166	20	164	11	159	234	12	1,115	599	106	14	3	....	8	..	10	41	265	3	1	1	34	2
.....	.....	....	....	....	....	....	....	....	....	....	....	.....	....	....	....	....	....	....	....	....	....	8	....	....	....	....	....
1	.....	....	....	....	....	....	....	....	....	....	....	.....	....	....	....	....	....	....	....	....	3	....	....	....	....	....	....
.....	.....	....	....	....	....	....	....	....	1	....	....	.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
.....	.....	....	1	....	....	....	....	....	....	....	....	.....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....
3,934	3,903	70	741	106	272	32	246	48	285	351	23	1,419	874	156	39	7	3	18	1	10	49	280	10	1	1	44	4

TABLE 14.—Statement of Immigration, via Ocean Ports, for the Fiscal Year 1928-29, showing Racial Origin and Month of Arrival

Racial Origin	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Totals
Albanian	5	7	5	3	3	.....	2	1	.....	1	1	.....	28
Arabian	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1
Armenian	.....	1	2	2	.....	.....	.....	.....	3	.....	7	2	17
Belgian	334	208	116	64	69	45	61	42	24	37	36	186	1,222
Bohemian	5	1	.....	.....	1	1	.....	.....	.....	.....	.....	.....	8
British—													
English	4,665	3,778	3,200	2,192	6,835	2,212	1,294	1,073	746	658	899	2,803	30,355
Irish	1,944	1,297	1,246	670	1,206	837	388	327	163	129	216	776	9,199
Scotch	2,527	1,884	2,067	1,218	3,233	1,225	764	609	519	298	505	1,338	16,137
Welsh	544	286	307	207	1,186	160	68	50	48	48	71	214	3,189
Bulgarian	36	7	13	26	32	20	30	15	32	34	20	17	282
Croatian	367	76	103	113	123	30	19	17	29	11	9	93	990
Czech	352	111	163	44	75	19	11	12	27	4	2	26	846
Dalmatian	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	1
Dutch	538	193	118	62	99	110	63	45	99	45	73	154	1,599
East Indian	3	16	8	1	6	4	3	3	5	3	.....	.....	52
Esthonian	17	11	8	4	14	15	3	1	16	1	.....	2	92
Finnish	370	421	410	238	369	432	388	304	204	134	131	250	3,651
French	122	77	73	70	62	56	37	44	31	33	35	105	745
German	2,064	2,092	1,897	1,230	1,445	777	515	627	458	207	210	1,693	13,215
Greek	51	37	45	34	87	64	82	72	67	67	62	68	736
Hebrew	232	222	340	285	201	304	292	427	329	233	207	229	3,301
Italian	33	47	96	78	66	47	59	75	101	70	48	72	792
Japanese	68	72	67	39	69	24	21	43	12	4	7	19	445
Jugo-Slav	678	371	227	175	844	299	9	23	42	11	27	118	2,824
Lettish	8	12	8	10	11	5	.....	3	5	2	3	7	74
Lithuanian	464	228	264	220	201	44	14	23	19	14	11	106	1,608
Magyar	1,211	1,395	745	594	720	304	177	177	202	94	117	506	6,242
Maltese	.....	.....	2	.....	2	2	2	6	1	1	.....	2	18
Moravian	.....	1	1	.....	.....	2	.....	.....	.....	.....	.....	.....	4
Negro	1	14	14	15	8	8	15	9	5	4	1	2	96
Persian	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Polish	1,343	1,698	1,231	1,387	1,065	336	184	175	216	78	84	472	8,269
Portuguese	1	1	1	1	4	.....	.....	.....	3	.....	.....	1	12
Roumanian	28	80	21	28	16	16	17	21	15	5	9	28	284
Russian	88	210	100	188	121	47	34	31	28	19	20	22	908
Ruthenian	2,863	3,104	2,443	2,438	2,129	545	205	192	238	131	121	1,162	15,571
Scandinavian—													
Danish	778	722	317	213	266	186	140	94	50	53	73	419	3,311
Icelandic	2	3	8	.....	.....	8	.....	1	.....	.....	.....	2	24
Norwegian	450	397	245	120	214	177	82	92	44	28	64	521	2,434
Swedish	691	439	424	213	369	250	263	124	75	64	96	289	3,297
Serbian	85	73	37	42	52	17	19	10	15	8	6	26	390
Slovak	992	893	560	480	528	252	72	75	70	56	36	289	4,303
Spanish	.....	.....	2	1	.....	1	2	10	.....	.....	.....	2	18
Spanish American	.....	1	.....	.....	.....	.....	.....	.....	1	1	.....	.....	3
Swiss	91	99	39	27	23	38	35	25	15	3	8	87	490
Syrian	4	10	9	7	4	4	4	11	14	1	4	3	75
Turkish	.....	.....	1	.....	1	.....	.....	.....	.....	1	.....	.....	3
Totals	24,056	20,545	16,983	12,739	21,759	8,924	5,374	4,889	3,971	2,591	3,219	12,112	137,162

TABLE 15.—Monthly Arrivals of Immigrants, by Occupation and Destination, at Ocean Ports, for the Fiscal Year ended March 31, 1929

Occupation and Destination	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Totals
Farming class	18,228	14,464	10,704	8,061	16,649	3,221	1,295	1,067	903	693	1,033	7,846	84,164
Labouring class	728	786	539	438	430	544	364	400	269	229	336	700	5,763
Mechanics	774	765	670	510	423	588	422	370	259	280	317	760	6,158
Trading and clerical classes	410	366	424	293	306	400	268	264	204	194	194	363	3,686
Mining class	84	89	74	69	79	84	44	36	30	28	17	66	700
Female domestic servants	2,017	2,062	2,133	1,498	1,693	1,561	1,098	958	663	355	441	1,136	15,615
Other classes	1,815	2,013	2,439	1,870	2,179	2,526	1,863	1,794	1,643	812	881	1,241	21,076
Totals	24,056	20,545	16,983	12,739	21,759	8,924	5,374	4,889	3,971	2,591	3,219	12,112	137,162
Nova Scotia	248	210	157	165	137	115	129	83	120	49	94	128	1,635
New Brunswick	420	437	248	41	46	57	36	42	29	32	53	147	1,588
Prince Edward Island	9	9	12	9	13	11	4	2	.....	6	.....	4	79
Quebec	1,755	1,770	1,652	1,138	1,129	1,413	1,094	1,058	697	541	587	1,240	14,074
Ontario	5,347	4,187	4,371	3,059	3,100	3,512	2,323	1,979	1,601	1,141	1,311	3,261	35,192
Manitoba	11,716	9,891	6,305	5,174	13,948	2,016	576	656	495	281	386	4,855	56,299
Saskatchewan	1,963	1,590	1,836	1,406	1,445	621	418	337	362	193	261	896	11,328
Alberta	1,721	1,653	1,615	1,255	1,410	639	405	379	373	169	257	1,050	10,926
British Columbia	877	798	784	492	531	540	389	353	294	179	269	530	6,036
Yukon Territory	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	1	3
Northwest Territories	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Not given	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	1
Totals	24,056	20,545	16,983	12,739	21,759	8,924	5,374	4,889	3,971	2,591	3,219	12,112	137,162

TABLE 16.—Statement of Immigration from the United States for the Fiscal Year 1928-29, showing Racial Origin and Month of Arrival

Racial Origin	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Totals
Albanian	5	.....	1	.....	.....	1	.....	.....	.....	.....	.....	.....	7
Arabian	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	1
Armenian	2	.....	2	.....	.....	5	.....	.....	.....	.....	1	.....	10
Belgian	21	12	2	3	9	5	9	6	.....	2	2	8	79
Bohemian	6	19	3	6	6	15	5	6	3	3	.....	14	86
British—													
English	813	1,012	986	919	1,135	818	738	564	484	482	426	804	9,181
Irish	338	373	412	356	467	330	342	246	172	176	207	348	3,767
Scotch	302	342	363	338	398	323	337	217	190	160	214	269	3,453
Welsh	24	31	23	33	38	25	23	18	19	36	6	24	300
Bulgarian	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	2
Croatian	1	.....	.....	7	9	2	2	.....	.....	1	1	1	24
Czech	1	.....	.....	1	.....	2	1	.....	.....	.....	.....	.....	5
Dutch	80	71	59	59	124	97	45	37	28	41	24	76	741
East Indian	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	1
Finnish	12	6	23	8	7	3	4	7	4	6	10	10	100
French	365	398	548	411	356	380	369	227	186	207	171	316	3,934
German	403	379	393	369	510	313	329	272	216	213	144	362	3,903
Greek	2	16	4	10	7	3	3	4	8	4	1	8	70
Hebrew	39	55	44	71	66	28	37	46	37	53	38	33	547
Italian	27	28	26	28	24	21	22	22	15	20	10	29	272
Japanese	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	1
Jugo-Slav	2	1	.....	8	1	.....	6	3	1	.....	2	8	32
Lettish	1	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	3
Lithuanian	1	1	3	1	.....	.....	2	5	.....	1	2	2	18
Magyar	11	8	10	12	9	4	19	9	.....	3	8	13	106
Maltese	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Moravian	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1
Negro	14	36	35	56	21	32	15	13	10	23	8	17	280
North American Indian	7	2	3	1	5	1	.....	.....	.....	2	1	1	23
Polish	16	11	31	31	18	32	21	27	20	12	13	14	246
Portuguese	1	.....	1	.....	1	.....	2	.....	2	2	.....	1	10
Roumanian	7	3	4	2	3	5	1	5	8	3	7	.....	48
Russian	54	25	42	15	44	21	10	33	12	13	5	11	285
Ruthenian	6	3	7	8	3	1	3	2	.....	.....	4	2	39
Scandinavian—													
Danish	39	18	40	39	34	38	40	19	20	15	18	31	351
Icelandic	1	1	1	1	2	4	8	2	1	.....	2	.....	23
Norwegian	210	120	116	136	158	124	164	108	69	28	43	143	1,419
Swedish	82	81	107	92	95	78	69	43	31	42	38	116	874
Serbian	3	1	2	.....	2	2	3	4	.....	.....	1	2	20
Slovak	1	3	2	2	4	6	4	.....	.....	6	1	11	40
Spanish	5	22	3	3	2	2	1	1	2	6	.....	2	49
Spanish American	.....	.....	.....	2	1	1	.....	.....	.....	.....	.....	.....	4
Swiss	19	16	18	11	18	13	14	8	5	7	5	22	156
Syrian	6	1	3	3	4	.....	18	1	1	5	2	.....	44
Turkish	.....	.....	.....	.....	.....	4	.....	.....	.....	.....	.....	.....	4
Totals	2,927	3,096	3,320	3,044	3,581	2,739	2,667	1,955	1,544	1,573	1,415	2,699	30,560

TABLE 17.—Monthly Arrivals of Immigrants from the United States, by Occupation and Destination, for the Fiscal Year 1928-29

Occupation and Destination	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Totals
Farming class	1,164	913	827	931	1,517	761	783	472	297	191	254	930	9,040
Labouring class	239	307	321	250	271	280	268	202	178	167	143	218	2,844
Mechanics	414	500	458	523	563	489	479	358	328	399	331	448	5,290
Trading and clerical classes	274	333	384	316	266	266	292	254	230	300	218	328	3,461
Mining class	23	39	41	36	24	21	32	6	11	12	5	5	255
Female domestic servants	52	59	83	80	78	50	38	39	37	21	25	64	626
Other classes	761	945	1,206	908	862	872	775	624	463	483	439	706	9,044
Totals	2,927	3,096	3,320	3,044	3,581	2,739	2,667	1,955	1,544	1,573	1,415	2,699	30,560
Nova Scotia	15	16	19	21	12	27	30	9	11	20	7	6	193
New Brunswick	35	43	33	29	39	54	53	56	39	44	42	51	518
Prince Edward Island	2	4	5	3	3	9	10	4	5	.....	3	2	50
Quebec	396	523	654	521	383	450	452	299	223	222	199	263	4,585
Ontario	923	1,204	1,385	1,218	1,314	1,057	962	887	736	889	742	1,147	12,464
Manitoba	175	126	133	146	207	138	111	90	57	42	48	79	1,352
Saskatchewan	468	280	267	296	497	296	337	183	158	113	134	432	3,461
Alberta	691	577	477	611	849	466	499	276	168	101	118	484	5,317
British Columbia	220	317	337	199	276	238	210	149	147	142	122	234	2,591
Yukon Territory	.....	4	10	.....	1	4	.....	2	.....	.....	.....	1	22
Not given	2	2	.....	.....	.....	.....	3	.....	.....	.....	.....	.....	7
Totals	2,927	3,096	3,320	3,044	3,581	2,739	2,667	1,955	1,544	1,573	1,415	2,699	30,560

During August, 1928, 8,449 young men came to Canada from the British Isles as harvesters, indicating their intention to remain if satisfied. All but 2,000 of these returned to the British Isles in the following autumn and winter. This special movement accounts for the heavy British immigration shown in table 14 for August, 1928.

TABLE 18.—Statement of Immigration, via Ocean Ports, showing Destination by Intended Occupation and Sex, for the Fiscal Year 1928-29

Destination	Totals	Farming Class				Labouring Class				Mechanics				Trading and Clerical Classes				Mining Class				Female Domestics		Other Classes			
		18 years and over		Under 18 years		18 years and over		Under 18 years		18 years and over		Under 18 years		18 years and over		Under 18 years		18 years and over		Under 18 years		18 years and over	Under 18 years	18 years and over		Under 18 years	
		M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.			M.	F.	M.	F.
Nova Scotia	1,635	177	52	126	40	279	13	37	18	65	16	8	3	29	19	4	3	49	4	12	6	192	56	35	170	107	115
New Brunswick	1,588	431	153	415	231	28	3	10	4	29	9	2	5	16	4	....	1	6	1	2	1	112	30	7	39	23	26
Prince Edward Island	79	38	4	5	3	2	....	....	....	.....	1	....	....	.....	....	....	....	....	....	....	....	4	1	1	9	5	6
Quebec	14,074	2,609	254	1,331	154	902	118	137	71	1,042	328	84	83	759	223	88	50	27	5	3	1	2,224	137	371	1,565	762	746
Ontario	35,192	8,372	905	2,259	606	1,843	353	386	219	2,046	662	263	231	979	490	133	103	211	35	24	10	5,388	595	540	4,144	2,253	2,142
Manitoba	56,299	45,056	1,929	2,156	1,377	231	33	50	37	296	72	30	25	146	47	11	8	10	1	1	1	2,971	210	80	766	399	356
Saskatchewan	11,328	4,943	676	919	541	78	18	45	39	102	28	11	10	49	16	7	10	10	1	2	1	1,462	130	48	1,011	613	558
Alberta	10,926	4,515	569	787	439	107	13	26	27	148	49	15	12	64	41	12	8	117	26	16	12	1,320	138	56	1,066	655	688
British Columbia	6,036	1,368	254	305	165	390	138	69	39	284	107	42	49	179	124	32	30	80	13	5	7	583	62	165	827	355	364
Yukon Territory	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	....	.....	.....	.....	.....	.....	.....	1	.....	.....	1
Northwest Territories	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....
Not given	1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Totals	137,162	67,509	4,796	8,303	3,556	3,860	689	760	454	4,013	1,272	455	418	2,221	964	288	213	510	86	65	39	14,256	1,359	1,304	9,598	5,172	5,002

TABLE 19.—Statement of Immigration, from the United States, showing Destination by Intended Occupation and Sex, for the Fiscal Year 1928-29

Destination	Totals	Farming Class				Labouring Class				Mechanics				Trading and Clerical Classes				Mining Class				Female Domestics		Other Classes			
		18 years and over		Under 18 years		18 years and over		Under 18 years		18 years and over		Under 18 years		18 years and over		Under 18 years		18 years and over		Under 18 years		18 years and over	Under 18 years	18 years and over		Under 18 years	
		M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.			M.	F.	M.	F.
Nova Scotia	193	10	3	.....	.....	5	1	....	....	23	7	1	2	8	7	2	4	6	1	1	....	2	.....	13	40	26	31
New Brunswick	518	53	9	14	11	63	5	7	4	41	12	6	5	17	8	2	2	1	....	....	....	12	3	15	62	76	90
Prince Edward Island	50	9	1	1	.....	1	1	....	....	2	1	....	....	1	1	....	....	....	....	....	....	2	.....	1	6	14	9
Quebec	4,585	222	54	79	58	414	64	57	31	556	114	57	51	290	110	44	35	29	5	....	2	124	10	229	600	682	668
Ontario	12,464	970	116	128	87	1,222	156	81	62	2,483	418	179	147	1,375	491	123	112	60	9	9	8	191	14	817	1,684	796	726
Manitoba	1,352	291	63	41	39	98	22	15	11	184	48	14	30	118	61	13	18	7	....	....	....	14	1	57	93	64	50
Saskatchewan	3,461	1,451	343	326	261	54	8	10	3	186	20	6	15	51	25	10	7	3	....	....	....	76	17	79	245	122	143
Alberta	5,317	2,179	611	527	476	84	9	15	14	220	45	16	11	82	42	12	13	10	3	5	1	96	18	61	380	182	205
British Columbia	2,591	331	113	92	68	234	40	24	23	258	92	17	20	217	103	29	27	63	12	2	4	43	3	162	351	138	125
Yukon Territory	22	1	.....	.....	.....	3	....	....	....	2	.....	....	....	.....	.....	....	....	14	....	....	....	.....	.....	1	1	.....	.....
Not given	7	2	.....	.....	.....	3	....	....	....	1	.....	....	....	1	....	....	....	....	....	....	....	.....	.....	.....	.....	.....	.....
Totals	30,560	5,519	1,313	1,208	1,000	2,181	306	209	148	3,956	757	296	281	2,160	848	235	218	193	30	17	15	560	66	1,435	3,462	2,100	2,047

TABLE 20.—Statement of Immigration for the Fiscal Year 1928-29, showing Nationality and Sex

Nationality	Totals	Via Ocean Ports				Totals	From the United States			
		18 years and over		Under 18 years			18 years and over		Under 18 years	
		M.	F.	M.	F.		M.	F.	M.	F.
African (not British)	2	1	1							
Albanian	12	10		2						
Arabian	22	8	7	5	2	2	2			
Argentinian	8	5	2	1		2	1	1		
Armenian	3	1		1	1					
Austrian	1,125	776	245	52	52	36	21	15		
Belgian	1,278	603	386	149	140	31	21	7	1	2
Bolivian	1				1					
Brazilian	8	2	2		4	1	1			
British	59,497	30,054	15,238	8,794	5,411	3,061	1,813	978	134	136
Bulgarian	279	216	41	11	11	1	1			
Chilian						1	1			
Costa Rican	1			1						
Cuban	1	1				3	1			2
Czecho-Slovak	7,214	5,686	855	343	330	25	15	9		1
Danish	3,319	2,092	717	276	234	68	51	10	4	3
Dutch	1,192	596	255	193	148	47	34	12	1	
Esthonian	113	61	45	4	3					
Finnish	4,271	2,052	1,732	245	242	17	9	7	1	
French	613	360	180	38	35	34	20	13		1
German	4,201	2,602	951	357	291	108	74	31	2	1
Greek	727	601	91	26	9	6	3	3		
Hungarian	5,165	3,391	877	465	432	24	13	11		
Icelandic	29	14	11	3	1	4	3	1		
Italian	744	128	281	205	130	38	20	10	3	5
Japanese	415	121	193	60	41					
Jugo-Slav	5,285	3,949	699	339	298	19	9	8		2
Latvian	124	58	48	8	10	2	2			
Lithuanian	1,929	1,427	367	70	65	6	2	4		
Luxemburg	27	18	5	2	2					
Mexican	3			2	1	3			2	1
Norwegian	2,414	1,453	547	218	196	128	97	25	3	3
Paraguayan	2			2						
Persian	6	1	2	1	2					
Peruvian	2	1			1					
Polish	25,739	16,260	5,460	2,102	1,917	66	46	19		1
Portuguese	2		1		1					
Roumanian	4,832	3,187	1,055	306	284	25	14	9	1	1
Russian	3,005	1,088	840	517	560	118	63	44	6	5
South American	1	1								
Spanish	13	5	2	2	4	3	2	1		
Swedish	2,636	2,013	329	166	128	106	80	25		1
Swiss	628	444	133	33	18	26	16	9		1
Syrian	58	19	23	8	8	3		2		1
Turkish	14	3	6	2	3	1	1			
Ukrainian	92	75	13	2	2	4	4			
U.S.A. Citizens	108	32	21	32	23	26,539	13,003	6,021	3,907	3,608
Uruguayan	3	2	1							
Venezuelan	1	1								
Totals	137,162	79,417	31,661	15,043	11,041	30,560	15,444	7,276	4,065	3,775

TABLE 21.—Immigration, from the United States, showing State of last residence, by Intended Occupation and Sex, for the Fiscal Year 1928-29.

State of Last Residence	Totals	Farming Class				Labouring Class				Mechanics				Trading and Clerical Classes				Mining Class				Female Domestics		Other Classes			
		18 years and over		Under 18 years		18 years and over		Under 18 years		18 years and over		Under 18 years		18 years and over		Under 18 years		18 years and over		Under 18 years		18 years and over	Under 18 years	18 years and over		Under 18 years	
		M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.			M.	F.	M.	F.
Alabama	23	4	1	2	.....	.....	.....	.....	.....	3	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	5	2	2	.....
Alaska	69	2	1	1	.....	9	1	1	.....	11	2	.....	.....	6	2	.....	.....	17	.....	.....	.....	6	.....	5	4	.....	1
Arizona	24	4	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	6	2	1	.....	.....	.....	1	5	.....	3
Arkansas	64	11	2	5	2	3	1	.....	1	7	1	.....	.....	2	.....	1	.....	.....	.....	.....	.....	1	.....	4	13	6	4
California	1,675	385	118	70	59	60	12	11	11	171	64	8	13	112	58	16	23	16	7	.....	2	20	4	78	185	84	88
Colorado	146	29	12	10	9	1	.....	1	.....	18	1	1	1	17	5	1	5	3	.....	.....	.....	.....	.....	9	14	5	4
Connecticut	334	24	4	6	2	26	3	1	1	42	11	9	7	13	6	4	.....	.....	.....	.....	.....	2	.....	15	44	67	47
Delaware	11	2	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	2	.....
District of Columbia	61	7	3	8	7	6	.....	.....	.....	3	1	.....	.....	7	3	1	.....	.....	.....	.....	.....	1	.....	3	8	1	2
Florida	183	23	7	4	4	14	3	3	2	20	8	1	2	22	9	1	2	1	.....	.....	.....	2	.....	11	25	11	8
Georgia	80	23	1	.....	2	4	.....	.....	.....	9	2	1	2	9	5	1	.....	.....	.....	.....	.....	2	.....	6	7	1	5
Idaho	362	123	44	46	46	8	2	2	3	8	1	.....	.....	6	4	1	1	5	1	.....	1	5	.....	13	25	7	10
Illinois	1,168	185	53	36	29	88	10	8	2	176	42	17	13	122	40	12	6	3	.....	.....	.....	29	.....	57	126	53	61
Indiana	423	74	9	6	6	35	6	2	.....	69	9	6	2	34	19	7	7	1	1	.....	.....	7	2	30	49	31	11
Iowa	402	153	34	32	29	8	1	2	.....	27	4	4	2	13	3	1	.....	1	.....	.....	.....	8	2	10	34	15	19
Kansas	223	72	12	13	14	6	1	1	.....	42	4	1	1	7	1	.....	2	.....	.....	.....	.....	5	.....	7	15	7	12
Kentucky	357	204	8	14	15	17	5	3	1	23	6	1	4	5	4	2	.....	.....	.....	.....	.....	3	.....	4	16	13	9
Louisiana	26	4	3	4	1	3	.....	.....	.....	1	1	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4	2	2
Maine	839	69	20	36	20	89	11	15	6	77	18	6	11	21	11	6	9	5	1	1	.....	22	3	28	112	111	131
Maryland	105	7	4	3	1	5	.....	.....	.....	14	6	4	.....	10	3	.....	.....	.....	.....	.....	.....	5	.....	6	15	15	7
Massachusetts	1,900	145	34	62	36	128	22	19	15	195	45	34	27	110	37	13	6	7	1	.....	.....	52	4	77	227	310	294
Michigan	5,077	468	90	61	48	523	41	22	16	1,075	137	57	44	581	192	44	36	30	3	4	6	75	6	304	589	316	309
Minnesota	1,842	550	109	130	96	112	9	5	4	200	32	12	14	102	46	9	6	11	.....	.....	.....	37	7	56	141	83	71
Mississippi	11	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	1	1
Missouri	324	74	20	16	9	9	4	1	1	58	6	2	.....	19	7	2	5	2	1	.....	1	6	1	19	39	10	12
Montana	586	164	49	36	33	30	2	4	1	63	10	4	9	19	8	5	8	5	.....	.....	.....	6	.....	15	59	26	30
Nebraska	301	109	45	34	25	8	.....	1	.....	7	2	.....	1	7	5	5	1	.....	.....	.....	.....	5	2	9	20	6	9
Nevada	23	9	4	1	1	3	.....	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	3	.....	.....	.....
New Hampshire	505	47	5	13	6	60	3	5	3	44	10	5	6	13	7	1	.....	.....	.....	.....	.....	14	4	13	76	89	81
New Jersey	475	31	7	2	1	25	2	3	.....	88	19	13	11	48	23	5	4	2	.....	.....	.....	14	.....	25	86	38	28
New Mexico	20	5	2	2	.....	.....	.....	.....	.....	2	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	1	1	2
New York	3,569	226	51	21	24	312	57	33	17	533	119	46	38	419	175	50	41	8	1	1	2	90	5	224	561	256	259
North Carolina	233	141	2	3	3	10	4	.....	1	13	1	.....	1	10	2	.....	.....	1	.....	.....	.....	1	.....	7	15	11	7
North Dakota	1,285	524	115	144	118	15	6	6	2	33	7	4	7	7	9	5	5	4	.....	.....	.....	31	6	21	92	53	71
Ohio	1,040	122	22	25	24	70	12	5	9	198	42	19	8	97	37	5	9	5	2	2	.....	16	.....	67	141	53	50
Oklahoma	107	29	8	5	12	3	.....	.....	.....	17	.....	.....	.....	2	2	1	.....	1	1	2	.....	2	1	1	11	4	5
Oregon	767	245	87	78	70	23	6	3	1	39	9	2	2	30	15	6	3	4	2	.....	1	8	3	12	67	26	25
Pennsylvania	1,082	86	13	18	13	104	14	11	6	246	45	8	9	75	25	4	12	9	2	2	1	9	1	82	152	70	65
Rhode Island	422	20	3	1	3	25	11	11	12	63	12	5	2	13	6	4	.....	.....	.....	.....	.....	13	1	21	57	75	61
South Carolina	12	4	.....	.....	.....	2	.....	.....	.....	1	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	1	1
South Dakota	300	114	25	28	23	7	.....	.....	.....	8	.....	.....	.....	7	4	.....	4	1	.....	.....	.....	6	3	12	28	21	9
Tennessee	64	17	1	2	1	6	1	.....	1	11	1	.....	.....	5	.....	.....	.....	.....	.....	.....	.....	1	.....	3	7	3	4
Texas	136	19	7	8	5	11	1	.....	.....	18	4	1	.....	8	2	3	.....	.....	.....	.....	.....	5	1	6	17	11	9
Utah	153	26	11	18	16	2	1	3	2	5	1	.....	2	3	4	2	.....	3	1	.....	.....	2	.....	28	18	2	3
Vermont	396	25	4	1	1	74	11	5	8	64	6	2	9	18	4	1	1	2	1	.....	.....	11	.....	14	38	44	50
Virginia	312	143	16	18	14	16	1	3	1	25	3	.....	1	6	1	.....	.....	.....	.....	.....	.....	2	1	6	21	16	18
Washington	2,142	540	187	128	112	160	25	12	14	124	46	12	15	112	49	13	17	34	2	4	1	19	4	70	219	109	114
West Virginia	93	25	5	6	4	5	1	.....	.....	15	1	.....	.....	6	3	.....	2	2	1	.....	.....	.....	.....	1	8	4	4
Wisconsin	536	134	28	31	22	40	13	7	7	52	10	9	12	20	6	3	1	4	.....	.....	.....	13	5	29	38	25	27
Wyoming	71	29	11	2	9	4	.....	.....	.....	11	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	3	.....	.....
Not given	201	40	14	18	23	12	3	.....	.....	26	5	2	2	10	2	.....	.....	.....	.....	.....	.....	2	.....	14	21	3	4
Totals	30,560	5,519	1,313	1,208	1,000	2,181	306	209	148	3,956	757	296	281	2,160	848	235	218	193	30	17	15	560	66	1,435	3,462	2,100	2,047

TABLE 22.—Immigration, via Ocean Ports, showing Age Groups by Racial Origin, Sex and Literacy, for the Fiscal Year 1928-29

Racial origin	10 to 14 years				15 to 19 years				20 to 24 years				25 to 29 years				30 to 39 years				40 to 49 years				50 years and over			
	Male		Female		Male		Female		Male		Female		Male		Female		Male		Female		Male		Female		Male		Female	
	Lit.	Ill.	Lit.	Ill.	Lit.	Ill.	Lit.	Ill.	Lit.	Ill.	Lit.	Ill.	Lit.	Ill.	Lit.	Ill.	Lit.	Ill.	Lit.	Ill.	Lit.	Ill.	Lit.	Ill.	Lit.	Ill.	Lit.	Ill.
Albanian	1	....	.....	....	4	....	1	....	2	....	2	....	8	....	1	....	4	....	1	....	2	....	.....	....	1	....	.....	....
Arabian	.....	....	.....	....	1	....	.....	....	.....	....	.....	....	.....	....	.....	....	.....	....	.....	....	.....	....	.....	....	.....	....	.....	....
Armenian	1	....	.....	....	.....	1	2	....	1	....	2	1	.....	....	2	....	1	....	1	1	.....	....	.....	....	.....	....	.....	1
Belgian	18	....	18	....	37	....	16	....	139	3	81	....	201	3	127	....	152	1	115	....	48	....	20	....	20	1	8	1
Bohemian	.....	....	.....	....	1	....	.....	....	1	....	1	....	.....	....	.....	....	1	....	1	....	1	....	.....	....	.....	....	.....	....
British—																												
English	941	4	519	2	4,069	2	962	....	5,577	....	1,382	....	3,664	1	1,420	1	3,074	5	2,064	....	1,145	....	1,026	2	463	1	646	5
Irish	169	....	137	1	775	....	547	....	1,793	2	906	....	1,154	4	551	....	884	3	516	2	307	....	185	....	108	2	141	1
Scotch	397	....	320	....	1,587	1	988	....	2,657	3	1,313	....	1,827	1	979	....	1,461	....	977	2	542	....	514	1	230	....	355	4
Welsh	83	....	74	....	359	....	81	....	668	1	79	....	512	....	108	....	465	....	155	....	128	....	70	....	22	....	18	....
Bulgarian	2	....	3	....	16	....	5	....	50	....	10	....	89	....	15	....	57	....	7	2	5	....	2	1	4	2	1	1
Croatian	2	....	2	....	34	....	11	....	210	....	36	....	324	....	43	....	200	....	20	3	26	....	.....	....	.....	....	.....	....
Czech	6	....	2	....	12	....	18	....	158	....	35	....	279	....	23	....	177	....	21	1	30	....	11	....	3	....	.....	....
Dalmatian	.....	....	.....	....	.....	....	.....	....	.....	....	1	....	.....	....	.....	....	.....	....	.....	....	.....	....	.....	....	.....	....	.....	....
Dutch	64	....	50	....	87	....	50	....	239	....	85	....	157	....	83	....	162	....	107	....	60	....	47	....	25	....	27	....
East Indian	8	....	.....	....	9	2	1	4	1	....	4	6	.....	....	4	....	.....	....	.....	2	.....	....	2	2	.....	....	.....	....
Esthonian	1	....	1	....	3	....	3	....	9	....	10	....	18	....	10	....	11	....	14	....	4	....	4	....	.....	....	1	....
Finnish	25	....	20	....	103	1	282	....	643	....	519	....	484	....	389	....	416	....	332	....	102	1	81	....	19	....	15	....
French	5	....	2	....	65	....	20	....	111	....	44	....	119	3	60	1	89	....	71	1	38	....	24	....	15	....	14	....
German	164	4	175	2	826	1	484	....	2,007	1	943	....	2,094	1	862	5	1,771	3	747	....	533	....	235	3	132	2	112	9
Greek	9	....	2	....	18	....	13	....	182	....	42	....	285	....	25	....	108	....	8	....	9	....	1	2	17	....	4	1
Hebrew	85	1	82	....	336	....	353	1	287	....	422	....	178	....	270	1	168	....	187	12	57	....	106	9	86	7	92	30
Italian	33	7	17	4	108	3	27	....	20	....	55	....	19	....	72	3	17	....	85	8	17	....	29	8	36	1	19	4
Japanese	22	....	8	....	48	....	60	1	35	....	99	....	31	....	36	....	28	....	23	....	1	....	10	....	.....	....	1	1
Jugo-Slav	5	....	5	....	46	....	22	....	623	....	50	1	1,034	....	78	2	608	....	57	3	142	....	4	....	.....	....	2	1
Lettish	.....	....	1	....	2	....	3	....	7	....	5	....	14	....	5	....	11	....	8	....	6	....	4	....	.....	1	1	1
Lithuanian	4	....	2	....	83	....	20	....	297	1	97	....	517	....	83	1	329	....	52	....	26	....	7	1	1	....	2	....
Magyar	49	....	36	....	160	1	101	1	710	....	266	1	1,544	....	319	3	1,472	....	306	1	324	....	71	1	21	1	23	....
Maltese	.....	....	.....	....	2	....	.....	....	4	....	1	....	2	....	3	....	1	1	.....	....	1	1	1	....	.....	....	1	....
Moravian	.....	....	.....	....	.....	....	1	....	1	....	.....	....	.....	....	1	....	.....	....	.....	....	.....	....	.....	....	.....	....	.....	....
Negro	2	....	2	....	3	....	19	....	3	....	29	....	2	....	19	....	1	....	12	....	.....	....	3	....	.....	....	1	....
Persian	.....	....	.....	....	.....	....	.....	....	.....	....	.....	....	.....	....	.....	....	.....	....	1	....	.....	....	.....	....	.....	....	.....	....
Polish	48	....	46	2	327	1	206	2	1,148	2	570	6	2,451	1	464	8	1,491	4	241	21	220	22	58	11	20	6	25	11
Portuguese	.....	....	.....	....	.....	....	2	....	2	....	2	....	.....	....	2	....	1	....	.....	....	1	....	1	....	.....	....	.....	....
Roumanian	3	....	4	....	21	....	10	....	20	....	18	....	52	....	15	1	57	....	13	....	32	....	6	....	5	....	4	....
Russian	6	1	3	2	70	....	22	1	139	....	42	3	182	....	32	3	143	....	38	7	52	....	15	6	19	2	11	7
Ruthenian	69	3	66	8	846	6	418	22	2,585	3	1,103	25	4,592	6	673	27	2,768	12	362	49	567	8	70	36	33	2	24	22
Scandinavian—																												
Danish	41	....	29	....	324	....	86	....	889	....	221	....	480	41	194	....	324	....	171	....	117	....	53	....	24	....	13	....
Iceland	.....	....	.....	....	.....	....	1	....	4	....	3	....	3	....	2	....	1	....	3	....	1	....	1	....	.....	....	1	....
Norwegian	33	....	22	....	276	....	78	....	562	....	162	....	316	....	137	....	246	....	149	1	87	....	48	....	37	....	20	....
Swedish	29	....	31	1	370	....	124	....	945	1	173	....	591	....	118	....	383	1	100	1	141	....	38	....	50	....	22	....
Serbian	1	....	.....	....	25	....	4	....	43	....	11	....	110	....	19	2	92	....	18	1	26	....	4	....	1	....	1	1
Slovak	17	....	16	....	37	....	75	....	909	....	207	3	1,503	1	158	3	808	....	122	1	91	....	14	....	3	....	2	....
Spanish	.....	....	1	....	1	....	.....	....	1	....	.....	....	2	....	.....	....	3	....	2	....	1	....	1	....	.....	....	1	....
Spanish American	.....	....	1	....	.....	....	.....	....	.....	....	.....	....	1	....	.....	....	1	....	.....	....	.....	....	.....	....	.....	....	.....	....
Swiss	3	....	1	....	34	....	11	....	126	....	39	....	96	....	28	....	60	....	27	....	20	....	5	....	5	....	6	....
Syrian	2	1	.....	....	6	....	6	2	8	1	5	2	4	....	2	2	2	....	9	....	3	....	.....	....	2	....	2	1
Turkish	.....	....	.....	....	.....	....	1	....	.....	....	1	....	.....	....	1	....	.....	....	.....	....	.....	....	.....	....	.....	....	.....	....
Totals	2,348	21	1,698	22	11,131	19	5,134	34	23,816	18	9,076	48	24,939	22	7,433	63	18,048	30	7,143	119	4,913	12	2,771	84	1,402	28	1,616	102

TABLE 23.–Immigration, from the United States, showing Age Groups by Racial Origin, Sex and Literacy, for the Fiscal Year 1928-29

Racial origin	10 to 14 years				15 to 19 years				20 to 24 years				25 to 29 years				30 to 39 years				40 to 49 years				50 years and over			
	Male		Female		Male		Female		Male		Female		Male		Female		Male		Female		Male		Female		Male		Female	
	Lit.	Ill.	Lit.	Ill.	Lit.	Ill.	Lit.	Ill.	Lit.	Ill.	Lit.	Ill.	Lit.	Ill.	Lit.	Ill.	Lit.	Ill.	Lit.	Ill.	Lit.	Ill.	Lit.	Ill.	Lit.	Ill.	Lit.	Ill.
Albanian			1						2														1		1			
Arabian																					1							
Armenian													1		1		6											
Belgian			2		5		3		4		4		3		9		9		6	1	13		5		4	2	2	1
Bohemian	2		2		3		2		10		9		7		1		16		4		8		2		3			
British—																												
English	191	3	145	6	371		188	1	877	2	398	1	810	1	415	1	1,248	4	668		847		406	3	642	3	343	
Irish	71	2	72		134	1	97		327		162		364		172		608	2	278		375		119		272	1	99	
Scotch	85	2	74	2	104		78		260		129		354		159	1	515		242		367		143		279	1	111	
Welsh	7		8		5		3		24		11		27		15		59		20		40	1	7		33		4	
Bulgarian																	1		1									
Croatian									3		1				3		3		2		2				1			
Czech													2								2							
Dutch	16	1	23		32		22		59		34		59		37		106		43		58	1	24		58		22	
East Indian									1																			
Finnish			2		3		1		16		8		11		4		15		12		9		4		3			
French	93	14	87	5	133	4	148	5	294	1	229	1	240	1	186	1	354	3	211	1	201	1	90	1	169	9	68	3
German	84		91		131	1	104		441	1	210		388		176	1	570	3	251		362		121	1	291		122	1
Greek			1		4				3		2		6		4		23		1		8				2		1	
Hebrew	11		5		21		12		50	1	42		49		33		91		47		47		15		36		17	
Italian	6		9		20		11		35		18	1	31		5		49		14		28		1		9			
Japanese					1																							
Jugo-Slav			1		2		1				1		7		1		8		1		2		1		1			1
Lettish																					1				2			
Lithuanian									3		3		1				5		2		2							
Magyar	2		4		4		3		8		11		4		3		10		5		12		1		7		3	
Maltese													1															
Moravian																									1			
Negro	2				11		3		37		22		36		21		54		20		23		14		16		7	
North American Indian			1		1				1		3		1		3		2		2		2				1			
Polish	7		2		8		12		33		17		23		9		48		14		13		4		14		2	1
Portuguese	1								2								3		1		1						1	
Roumanian	1				1		2				4		2		3		12		3	1	5		3		3		1	
Russian	15		9		8		7		10	2	9		18		12		43		20		20		8		17		5	
Ruthenian					1		2		2		2		4				11		2		1		2		3	1		
Scandinavian—																												
Danish	6		4	1	15		12	1	34		17		30		17		59	1	23		28		6		20		10	
Icelandic	1				1				1						3		6		2		2		1		3		2	
Norwegian	45		34		86		42		147		50		130		54		223		90		112		34	1	103		33	
Swedish	22		7		31		17		83		36		92		37		148		44		107		37		71		12	
Serbian					3		1				1		3		1		4		2		4							
Slovak			2		4		2		3		2		3		1		6		3		4				2			
Spanish	2				6		2		3		3	1	7		2		6		3	1	3		1					
Spanish American			1						1								1										1	
Swiss	2		2		7		5		11		7		19		8		23		11		18		6		14		3	
Syrian	2		1		1		2		4		5	1	5		3		1		2		3							
Turkish													2															
Totals	674	22	590	14	1,157	6	782	7	2,789	7	1,450	5	2,740	2	1,398	4	4,346	13	2,050	4	2,731	3	1,056	6	2,081	17	869	7

TABLE 24.—Immigration, via Ocean Ports, showing Language of Immigrants

Racial Origin	French	English	German	Norwegian	Swedish	Icelandic	Flemish	Dutch	Danish	Finnish	Esthonian	Lettish	Lithuanian	Russian
Albanian													1	
Arabian														
Armenian														
Belgian	165	18	2				820	3						
Bohemian		1												
British—														
English	1	26,973	1											
Irish		8,188												
Scotch		14,159												
Welsh		2,823												
Bulgarian														
Croatian		1	6											
Czech		4	16											2
Dalmatian														
Dutch		56	216				5	906	3					52
East Indian		3												
Esthonian		3	8								72		1	1
Finnish		3			120				4	3,292	8			5
French	628	38	10				4							
German	13	43	10,613	1	2			4	29		3	1	8	119
Greek		3	1											
Hebrew	2	169	65						1			1	34	340
Italian	1	32												
Japanese														
Jugo-Slav		2	35											1
Lettish			3									56	3	6
Lithuanian		15	16								1	1	1,480	5
Magyar	2	3	68										1	
Maltese		12												
Moravian														
Negro		96												
Persian		1												
Polish	3	14	69				1	1	1			1	1	139
Portuguese		9												
Roumanian	3	2	26											2
Russian	2	17	21		1				1	5			3	669
Ruthenian		3	48						1	1	1			309
Scandinavian—														
Danish	2	53	9	10	17				2,876					
Icelandic				3		17								
Norwegian		45	1	2,092	22	6			8					
Swedish		24	3	15	3,046		1		16	13	1			
Serbian		1	47											
Slovak		5	18										1	2
Spanish	1	3												
Spanish American		2												
Swiss	150	19	273					13						
Syrian	8	6												
Turkish														
Totals	981	52,849	11,575	2,121	3,208	23	831	927	2,940	3,311	86	60	1,533	1,652

10 Years and over, by Racial Origin, for the Fiscal Year 1928-29

Hebrew	Ruthenian Russniak Ukrainian	Polish	Roumanian	Slovenian	Croat (Serbian)	Czech (Bohemian)	Hungarian (Magyar)	Italian	Spanish	Portuguese	Greek	Albanian	Turkish	Bulgarian	Japanese	East Indian	Armenian (Aramaic)	Syrian (Arabic)
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	23	....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	....	.....	.....	.....	.....	1
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	....	.....	.....	.....	10	4
.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	....	.....	.....	.....	.....	.....
1	2	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	17	.....	....	254	.....	.....	.....	.....
.....	1	.....	.....	.....	891	7	5	.....	.....	.....	.....	.....	....	.....	.....	.....	.....	.....
.....	131	13	.....	2	3	583	22	.....	.....	.....	.....	.....	....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	....	.....	.....	.....	.....	.....
.....	2	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	....	.....	.....	42	.....	.....
.....	1	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	1	.....	....	.....	.....	.....	.....	.....
1	12	103	33	7	29	15	80	.....	.....	.....	.....	.....	....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	653	1	....	68	.....	.....	.....	.....
1,571	7	525	33	.....	.....	4	18	.....	.....	.....	.....	.....	....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	558	.....	.....	1	.....	....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	....	.....	404	.....	.....	.....
.....	.....	1	4	241	1,989	382	24	.....	.....	.....	3	.....	....	1	.....	.....	.....	.....
.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	....	.....	.....	.....	.....	.....
.....	.....	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	....	.....	.....	.....	.....	.....
.....	3	.....	13	.....	6	30	5,285	.....	.....	.....	.....	.....	....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	5	1	.....	.....	.....	....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	3	.....	.....	.....	.....	.....	.....	....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	....	.....	.....	.....	.....	.....
7	202	6,949	.....	.....	.....	3	1	.....	.....	.....	.....	.....	....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	....	.....	.....	.....	.....	.....
1	31	1	162	.....	15	1	17	.....	.....	.....	.....	.....	....	.....	.....	.....	.....	.....
7	17	60	2	.....	1	.....	.....	.....	.....	.....	.....	.....	....	.....	.....	.....	.....	.....
.....	11,490	2,285	37	1	14	151	64	.....	.....	.....	.....	.....	....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	....	.....	.....	.....	.....	.....
.....	.....	.....	8	1	292	1	10	.....	.....	.....	.....	.....	....	.....	.....	.....	.....	.....
.....	46	8	.....	2	13	3,830	45	.....	.....	.....	.....	.....	....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	9	.....	.....	.....	....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	6	.....	.....	.....	.....	....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	....	.....	.....	.....	.....	46
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	....	1	.....	.....	.....	.....	1
1,588	11,947	9,956	292	254	3,255	5,012	5,571	570	11	2	679	24	1	323	404	42	10	52

TABLE 25.—Immigration, from the United States, showing Language of

Racial Origin	French	English	German	Norwegian	Swedish	Icelandic	Flemish	Dutch	Danish	Finnish	Lettish	Lithuanian
Albanian		1										
Arabian		1										
Armenian		2										
Belgian	11	37					25					
Bohemian		62										
British—												
English		7,572	2									
Irish		3,156										
Scotch		2,906										
Welsh		264										
Bulgarian												
Croatian		8										
Czech		2										
Dutch		569	6					20				
East Indian		1										
Finnish		58								30		
French	1,171	1,379	2				1					
German	4	3,137	195									
Greek		20										
Hebrew		333	4									
Italian	5	164										
Japanese		1										
Jugo-Slav		19	1									1
Lettish		1									2	
Lithuanian		13										3
Magyar	1	47	3									
Maltese		1										
Moravian		1										
Negro		266										
North American Indian		17										
Polish		151	2									
Portuguese		9										
Roumanian		21										
Russian		155	4					1				1
Ruthenian		14	2									
Scandinavian—												
Danish		230	1						53			
Icelandic		20				2						
Norwegian		1,078		106								
Swedish		639	2	2	100					1		
Servian		13										
Slovak		14										
Spanish	1	33										
Spanish American		3										
Swiss	4	119	13									
Syrian		22										
Turkish		1										
Totals	1,197	22,560	237	108	100	2	26	21	53	31	2	5

Immigrants, 10 Years and Over, by Racial Origin, for the Fiscal Year 1928-29

Russian	Hebrew	Ruthenian Russniak Ukrainian	Polish	Roumanian	Croat (Serbian)	Czech (Bohemian)	Hungarian (Maygar)	Italian	Spanish	Greek	Albanian	Turkish	Bulgarian	Armenian	Syrian
											4				
												2		4	
						7									
													2		
					7										
						2									
2		1	2			1	7		1						
										35					
6	126		3	2			3								
								68							
1					2		3								
							26								
1	1		52												
		1		19											
38	1	1	2												
		8	7												
					6										
					1	16	1		6						
									1						
												1			8
48	128	11	66	21	16	26	40	68	8	35	4	3	2	4	8

TABLE 26.—Immigration, via Ocean Ports, showing Conjugal Condition, by Age Groups and Sex, for the Fiscal Year 1928-29

Age Groups	Males				Females			
	Married	Single	Widowed	Divorced	Married	Single	Widowed	Divorced
Years 15-19	30	11,119	1	.....	253	4,914	.....	1
" 20-24	2,887	20,935	10	2	2,300	6,791	22	11
" 25-29	11,345	13,481	109	26	3,777	3,627	62	30
" 30-39	12,942	4,854	244	38	4,851	2,057	285	69
" 40-49	4,087	655	162	21	1,937	483	412	23
50 years and over	1,098	123	201	8	768	141	799	10

TABLE 27.—Immigration, from the United States, showing Conjugal Condition, by Age Groups and Sex, for the Fiscal Year 1928-29

Age Groups	Males				Females			
	Married	Single	Widowed	Divorced	Married	Single	Widowed	Divorced
Years 15-19	31	1,132	.....	.....	224	562	3	.....
" 20-24	498	2,288	5	5	998	441	5	11
" 25-29	1,259	1,439	24	20	1,154	208	27	13
" 30-39	2,836	1,358	82	83	1,758	210	65	21
" 40-49	1,948	584	122	80	869	72	102	19
50 years and over	1,374	329	348	47	524	59	289	4

TABLE 28.—Rejections, at Ocean Ports, showing Nationality and Sex, for the Fiscal Year 1928-29

—	18 years and over		Under 18 years	
	Male	Female	Male	Female
Arabian	2	.....	.....	.....
Argentinian	1	.....	.....	.....
Austrian	4	.....	.....	.....
British	109	24	18	3
Cuban	1	.....	.....	.....
Czecho-Slovak	3	.....	2	.....
Danish	16	3	1	.....
Dutch	1	.....	.....	.....
Finnish	17	1	2	.....
French	1	2	.....	.....
German	14	.....	.....	.....
Greek	5	1	1	.....
Hungarian	5	.....	1	.....
Italian	18	2	.....	.....
Japanese	12	.....	.....	.....
Jugo-Slav	2	.....	.....	.....
Latvian	1	1	.....	.....
Lithuanian	5	.....	.....	.....
Norwegian	11	1	1	.....
Panamaan	1	.....	.....	.....
Polish	16	2	.....	.....
Roumanian	5	.....	.....	.....
Russian	8	2	1	.....
Spanish	4	.....	1	.....
Swedish	23	.....	.....	.....
Swiss	1	.....	.....	.....
Syrian	.....	1	.....	.....
U.S.A. citizens	3	.....	.....	.....
Totals	289	40	28	3

TABLE 29.—Statement of Non-immigrants, via Ocean Ports, showing Sex and Class of Travel, for the Fiscal Year 1928-29

—	Saloon				Cabin Class				Third Class			
	18 years and over		Under 18 years		18 years and over		Under 18 years		18 years and over		Under 18 years	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Canadian Born Returning	799	980	76	100	2,156	2,780	487	542	1,009	1,475	2,087	2,098
British Born Returning	190	149	4	2	1,530	1,645	64	76	5,542	7,541	363	398
British National Returning	101	134	11	7	411	375	21	22	1,036	524	44	38
Alien National Returning	29	20	3	.....	196	94	4	8	1,605	501	31	32
Non-immigrant Tourist	649	539	44	60	2,154	1,917	151	143	1,549	2,224	116	127
" Professional	.....	.....	.....	.....	2	2	.....	.....	2	6	.....	.....
" Student	7	2	8	6	13	7	6	.....	8	1	1	.....
" Theatrical	.....	.....	.....	.....	98	77	.....	.....	10	6	.....	.....
" In transit	781	561	47	63	640	421	45	40	420	59	19	7
Totals	2,556	2,385	193	238	7,200	7,318	778	831	11,181	12,337	2,661	2,700

TABLE 30.—Origin, Sex, Occupation and Destination of Immigrant Arrivals

—	Sex					Trade or								
	18 years and over		Under 18 years			Farming Class			Labouring Class			Mechanics		
	Males	Females	Males	Females	Totals	Males	Females	Children	Males	Females	Children	Males	Females	Children
Albanian	20	5	2	1	28	18	2	2	2	....	1	.....	.....	....
Arabian	.....	.....	1	.....	1	.....	.....	.....	.....	....	.....	.....	.....	....
Armenian	2	10	3	2	17	2	1	3	.....	....	.....	.....	.....	....
Belgian	585	364	143	130	1,222	495	110	71	16	7	5	50	14	14
Bohemian	3	2	1	2	8	2	1	3	.....	....	.....	.....	.....	....
British—														
English	15,687	7,365	4,981	2,322	30,355	11,124	1,091	4,185	1,375	291	469	1,538	497	433
Irish	4,708	2,798	1,014	679	9,199	3,524	330	912	415	46	81	285	82	64
Scotch	7,450	5,032	2,273	1,382	16,137	4,839	403	1,652	782	149	303	848	219	168
Welsh	1,987	501	441	260	3,189	1,688	137	469	82	10	15	84	20	20
Bulgarian	220	43	10	9	282	145	2	1	72	1	.....	3	.....	1
Croatian	780	110	58	42	990	778	1	14	1	....	1	1	.....	....
Czech	651	106	56	33	846	649	25	42	.....	....	.....	1	.....	....
Dalmatian	.....	1	.....	.....	1	.....	.....	.....	.....	....	.....	.....	.....	....
Dutch	691	386	296	226	1,599	640	174	382	9	....	14	23	7	3
East Indian	3	25	23	1	52	.....	1	.....	3	12	9	.....	.....	....
Esthonian	44	42	4	2	92	44	2	3	.....	....	.....	.....	.....	....
Finnish	1,713	1,618	192	128	3,651	1,371	102	104	246	14	29	65	15	3
French	421	227	48	49	745	246	19	18	56	16	14	66	37	8
German	7,166	3,360	1,445	1,244	13,215	6,577	1,085	1,748	68	8	25	352	45	21
Greek	607	97	26	6	736	528	1	8	62	....	2	9	1	....
Hebrew	945	1,378	539	439	3,301	173	53	94	156	18	112	401	268	110
Italian	150	300	213	129	792	81	7	13	39	7	33	15	3	9
Japanese	121	214	66	44	445	62	24	9	48	87	24	4	9	3
Jugo-Slav	2,436	222	92	74	2,824	2,434	17	24	.....	....	2	1	.....	....
Lettish	41	25	2	6	74	39	3	2	1	....	.....	.....	1	....
Lithuanian	1,252	262	51	43	1,608	1,249	19	18	.....	....	.....	1	.....	....
Magyar	4,179	1,077	515	471	6,242	4,164	115	128	2	1	7	2	.....	....
Maltese	12	6	.....	.....	18	7	.....	.....	2	....	.....	.....	1	....
Moravian	1	2	1	.....	4	1	.....	.....	.....	....	.....	.....	.....	....
Negro	8	83	3	2	96	1	.....	.....	5	....	.....	1	.....	....
Persian	.....	1	.....	.....	1	.....	.....	.....	.....	....	.....	.....	.....	....
Polish	5,597	1,606	590	476	8,269	5,545	258	414	19	2	10	21	13	3
Portuguese	4	7	.....	1	12	2	2	.....	.....	....	.....	.....	.....	....
Roumanian	182	66	22	14	284	171	9	4	4	2	3	5	3	....
Russian	589	183	77	59	908	571	50	57	6	2	5	3	4	....
Ruthenian	11,239	2,810	852	670	15,571	11,218	391	790	11	....	19	1	1	1
Scandinavian														
Danish	2,087	731	284	209	3,311	1,853	131	230	65	4	10	119	14	3
Icelandic	9	11	3	1	24	3	1	2	2	....	.....	2	.....	....
Norwegian	1,467	588	219	160	2,434	1,261	67	166	125	7	11	39	7	6
Swedish	2,376	571	220	130	3,297	2,134	77	199	162	3	8	39	6	3
Serbian	289	60	25	16	390	287	20	14	.....	....	.....	1	.....	....
Slovak	3,328	574	209	192	4,303	3,328	42	51	.....	....	2	.....	.....	....
Spanish	8	4	2	4	18	2	.....	.....	1	....	.....	1	.....	....
Spanish American	2	.....	.....	1	3	1	.....	.....	.....	....	.....	.....	.....	....
Swiss	334	115	27	14	490	237	19	20	22	2	.....	31	5	....
Syrian	23	29	14	9	75	15	4	7	1	....	.....	1	.....	....
Turkish	.....	3	.....	.....	3	.....	.....	.....	.....	....	.....	.....	.....	....
Totals	79,417	33,020	15,043	9,682	137,162	67,509	4,796	11,859	3,860	689	1,214	4,013	1,272	873

for Canada, at Ocean Ports, for the Fiscal Year ended March 31, 1929

Occupation										Destination										
Trading Class			Mining Class				Other Classes													
Males	Females	Children	Males	Females	Children	Female Domestic Servants	Males	Females	Children	Nova Scotia	New Brunswick	Prince Edward Island	Quebec	Ontario	Manitoba	Saskatchewan	Alberta	British Columbia	Yukon Territory	Northwest Territories	Not given
....	....	....	....	....	....	3	....	....	....	....	....	....	6	4	14	1	3	....	....	....	..
....	....	....	....	....	....	....	....	....	1	....	....	....	....	1	....	....	....	....	....	....	..
....	....	....	....	....	....	3	....	6	2	....	....	....	3	11	....	....	2	1	....	....	..
9	....	1	5	2	....	42	10	189	182	8	....	....	258	482	336	55	69	14	....	....	..
....	....	....	....	....	....	1	1	....	....	....	....	....	....	3	5	....	....	....	....	....	..
815	411	206	242	50	56	2,677	593	2,348	1,954	1,006	496	19	3,805	10,402	8,165	2,069	2,333	2,060	....	....	..
351	117	54	10	1	....	1,683	123	539	582	75	185	4	1,296	4,800	1,276	547	690	326	....	....	..
558	257	128	146	15	34	2,753	277	1,236	1,370	238	424	5	2,037	7,012	3,557	847	1,079	936	1	1	..
43	14	5	59	10	11	167	31	143	181	30	96	3	221	816	1,320	213	345	144	1	....	..
....	....	....	....	....	....	18	....	22	17	....	....	....	2	276	....	2	2	....	....	....	..
....	....	....	....	....	....	31	....	78	85	11	....	....	34	159	630	53	73	30	....	....	..
....	....	....	....	....	....	33	1	48	47	1	....	....	18	149	569	60	44	5	....	....	..
....	....	....	....	....	....	1	....	....	....	....	....	....	....	1	....	....	....	....	....	....	..
12	1	1	....	....	....	99	7	105	122	6	2	....	77	420	506	335	200	53	....	....	..
....	....	....	....	....	....	1	....	11	15	....	....	....	....	1	....	....	1	50	....	....	..
....	....	....	....	....	....	35	....	5	3	....	....	....	....	9	58	3	19	3	....	....	..
8	7	....	16	....	....	1,288	7	192	184	5	18	....	996	2,174	64	39	51	304	....	....	..
25	11	1	4	4	3	46	24	94	53	23	2	1	414	147	50	70	26	12	....	....	..
119	18	6	4	....	....	1,394	46	810	889	18	5	3	824	1,141	8,270	1,769	1,060	125	....	....	..
6	2	1	....	....	....	56	2	37	21	2	1	....	49	625	11	21	8	19	....	....	..
160	61	63	....	....	....	585	55	393	599	14	10	6	1,172	1,276	494	174	103	51	....	....	1
5	7	3	4	1	....	21	6	254	284	17	....	....	158	481	29	5	29	73	....	....	..
3	28	4	....	1	....	6	4	59	70	....	....	....	....	....	3	2	11	428	1	....	..
....	....	....	....	....	....	82	1	123	140	....	....	....	53	230	2,255	60	124	102	....	....	..
....	....	....	....	....	....	14	1	7	6	....	1	....	1	14	46	3	8	1	....	....	..
....	....	....	1	....	....	162	1	81	76	4	....	....	91	96	1,197	132	80	8	....	....	..
1	2	2	....	....	....	253	10	706	849	28	1	....	370	881	3,561	913	475	13	....	....	..
3	....	....	....	....	....	....	....	5	....	....	....	....	7	8	2	....	....	1	....	....	..
....	....	....	....	....	....	1	....	1	1	....	....	....	....	3	1	....	....	....	....	....	..
....	....	....	....	....	....	80	1	3	5	5	2	....	50	39	....	....	....	....	....	....	..
....	....	....	....	1	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	..
4	3	3	....	....	....	839	8	491	636	15	1	....	301	800	5,659	811	650	32	....	....	..
2	1	....	....	....	....	3	....	1	1	....	....	....	7	3	2	....	....	....	....	....	..
1	....	1	....	....	....	26	1	26	28	....	1	....	27	47	162	34	10	3	....	....	..
2	2	3	....	....	....	47	7	78	71	2	6	....	45	78	520	151	81	25	....	....	..
....	....	....	....	....	....	1,785	9	633	712	26	....	....	279	768	11,279	1,587	1,585	47	....	....	..
31	4	7	1	1	....	391	18	186	243	56	262	33	555	370	1,127	292	518	98	....	....	..
....	....	....	....	....	....	7	2	3	2	....	....	....	....	....	21	2	....	1	....	....	..
15	3	2	9	....	....	359	18	145	194	4	16	4	141	154	551	4559	601	404	....	....	..
15	3	1	9	....	....	352	17	130	139	10	59	....	292	622	1,102	246	364	602	....	....	..
1	....	....	....	....	....	11	....	29	27	....	....	....	7	89	254	26	11	3	....	....	..
....	....	....	....	....	....	198	....	334	348	17	....	....	251	461	3,091	219	231	33	....	....	..
2	....	....	....	....	....	....	2	4	6	....	....	....	12	3	1	1	....	1	....	....	..
....	....	....	....	....	....	....	1	....	1	....	....	....	1	1	....	1	....	....	....	....	..
25	8	6	....	....	....	49	19	32	15	1	....	1	193	102	109	22	34	28	....	....	..
5	4	3	....	....	....	12	1	9	13	13	....	....	20	31	1	4	6	....	....	....	..
....	....	....	....	....	....	1	....	2	....	....	....	....	....	2	1	....	....	....	....	....	..
2,221	964	501	510	86	104	15,615	1,304	9,598	10,174	1,635	1,588	79	14,074	35,192	56,299	11,328	10,926	6,036	3	1	1

TABLE 31.—Origin, Sex, Occupation and Destination of Immigrant Arrivals,

	Sex					Trade or								
	18 years and over		Under 18 years			Farming Class			Labouring Class			Mechanics		
	Males	Females	Males	Females	Totals	Males	Females	Children	Males	Females	Children	Males	Females	Children
Albanian	3	1	1	2	7	.....	.....	.....	.....	.....	1	.....	.....	.....
Arabian	1	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Armenian	7	1	1	1	10	.....	.....	.....	2	.....	.....	4	.....	.....
Belgian	39	31	4	5	79	24	9	5	3	1	1	8	4	.....
Bohemian	46	18	9	13	86	28	7	13	4	1	3	12	1	3
British—														
English	4,686	2,349	1,150	996	9,181	1,504	375	516	602	99	95	1,281	284	202
Irish	2,033	889	419	426	3,767	673	116	242	349	44	32	513	101	72
Scotch	1,837	828	414	374	3,453	522	121	207	235	35	42	596	101	73
Welsh	188	58	25	29	300	54	10	21	23	1	1	55	5	7
Bulgarian	1	1	.....	.....	2	1	.....	.....	.....	.....	.....	.....	.....	.....
Croatian	9	6	5	4	24	2	.....	1	1	.....	.....	5	2	8
Czech	4	.....	1	.....	5	2	.....	.....	.....	.....	.....	1	.....	.....
Dutch	358	173	96	114	741	148	48	82	47	6	20	79	16	23
East Indian	1	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	1	.....	.....
Finnish	56	29	5	10	100	16	6	6	12	1	1	7	5	2
French	1,336	889	895	814	3,934	395	98	189	307	52	82	372	83	85
German	2,131	954	433	385	3,903	917	230	352	196	34	31	527	82	33
Greek	44	8	8	10	70	4	1	9	19	.....	1	4	1	.....
Hebrew	290	163	56	38	547	11	3	1	23	2	7	54	12	21
Italian	167	44	28	33	272	19	4	9	46	3	4	59	5	8
Japanese	1	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	1	.....	.....
Jugo-Slav	20	6	3	3	32	5	1	4	4	.....	.....	9	1	.....
Lettish	3	.....	.....	.....	3	3	.....	.....	.....	.....	.....	.....	.....	.....
Lithuanian	11	5	.....	2	18	4	.....	.....	2	.....	.....	3	3	.....
Magyar	42	25	19	20	106	22	4	17	6	1	1	6	2	2
Maltese	1	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	1	.....	.....
Moravian	1	.....	.....	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....
Negro	172	87	12	9	280	2	.....	.....	131	5	4	23	6	6
North American Indian	8	8	1	6	23	4	1	.....	.....	.....	.....	2	2	1
Polish	136	56	29	25	246	54	13	23	19	8	7	34	2	.....
Portuguese	6	2	2	.....	10	.....	.....	.....	2	.....	1	4	.....	.....
Roumanian	23	17	5	3	48	9	4	4	5	1	.....	6	1	.....
Russian	114	56	56	59	285	73	39	94	7	1	1	10	3	4
Ruthenian	22	8	7	2	39	17	3	3	1	.....	.....	.....	.....	.....
Scandinavian—														
Danish	181	82	45	43	351	93	22	43	18	.....	4	38	3	4
Icelandic	13	8	1	1	23	4	2	2	2	.....	.....	6	1	.....
Norwegian	770	286	193	170	1,419	565	125	228	45	3	2	80	10	12
Swedish	520	179	100	75	874	280	55	100	49	5	12	122	15	8
Serbian	13	5	1	1	20	5	.....	.....	2	1	1	3	.....	.....
Slovak	20	8	8	4	40	10	2	7	3	1	1	4	.....	1
Spanish	22	11	10	6	49	7	4	12	6	1	.....	4	1	.....
Spanish American	2	1	.....	1	4	1	.....	.....	.....	.....	.....	.....	.....	.....
Swiss	91	38	15	12	156	40	10	18	9	.....	2	21	5	2
Syrian	13	12	8	11	44	.....	.....	.....	.....	.....	.....	1	.....	.....
Turkish	2	.....	.....	2	4	.....	.....	.....	1	.....	.....	.....	.....	.....
Totals	15,444	7,342	4,065	3,709	30,560	5,519	1,313	2,208	2,181	306	357	3,956	757	577

for Canada, from the United States, for the Fiscal Year ended March 31, 1929

Occupation										Destination									
Trading Class			Mining Class				Other Classes												
Males	Females	Children	Males	Females	Children	Female Domestic Servants	Males	Females	Children	Nova Scotia	New Brunswick	Prince Edward Island	Quebec	Ontario	Manitoba	Saskatchewan	Alberta	British Columbia	Northwest Territories	Not given
2	1	2	....	....	....	.....	1	.....	.....	....	....	....	6	.....	1	.....	.....	.....	....	....
1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
1	1	1	....	....	....	.....	.....	.....	1	....	....	....	2	7	.....	.....	.....	1	....	....
2	2	....	1	2	....	1	1	12	3	3	....	....	5	47	6	12	3	3	....	....
2	.....	....	.....	.....	....	3	.....	6	3	....	....	....	3	22	6	21	27	7	....	....
720	310	149	65	12	11	140	514	1,129	1,173	79	236	21	918	4,556	347	661	1,330	1,025	7	1
329	116	61	18	6	8	76	151	430	430	26	55	7	293	1,809	157	353	726	339	1	1
277	120	54	31	3	2	72	176	376	410	45	42	11	245	1,626	157	298	596	429	4	....
29	9	5	8	1	3	2	19	30	17	3	3	....	17	143	14	22	60	38	....	....
.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	1	.....	1	....	....
1	.....	.....	.....	.....	.....	.....	.....	4	.....	.....	.....	.....	.....	20	2	2	.....	.....	.....	....
.....	.....	.....	.....	.....	.....	.....	1	.....	1	.....	.....	.....	.....	3	1	1	.....	.....	.....	....
52	11	9	2	....	2	8	30	84	74	1	4	....	35	293	40	89	189	88	2	....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
3	2	1	14	....	....	2	4	13	5	....	1	....	10	46	9	7	14	12	1	....
157	81	53	12	2	1	101	93	472	1,299	14	156	9	2,454	741	99	172	199	90	....	....
249	92	60	21	2	3	90	271	424	339	11	5	2	183	1,515	198	786	968	231	4	....
13	3	3	....	....	....	1	4	2	5	....	....	....	9	46	4	.....	5	6	....	....
159	43	15	....	....	....	2	43	101	50	3	1	....	156	330	24	8	15	10	....	....
23	8	5	1	....	....	.....	19	24	35	....	5	....	54	178	5	3	13	14	....	....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	....	....
2	.....	.....	.....	.....	.....	.....	.....	4	2	.....	.....	.....	.....	18	1	10	.....	3	....	....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1	.....	1	....	....
2	1	1	....	....	....	.....	.....	1	1	....	....	....	3	9	.....	.....	4	2	....	....
2	.....	....	1	....	....	.....	5	18	19	....	....	....	7	46	2	25	24	2	....	....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	....	....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	....	....
.....	2	....	....	....	....	46	16	28	11	....	1	....	38	217	13	2	4	5	....	....
1	.....	.....	.....	.....	.....	.....	1	5	6	....	....	....	7	11	.....	3	.....	2	....	....
14	3	2	1	....	....	4	14	26	22	1	1	....	7	128	30	41	31	6	....	1
.....	.....	.....	.....	.....	.....	.....	.....	2	1	.....	.....	.....	2	6	.....	.....	.....	2	....	....
2	2	....	....	....	....	3	1	6	4	....	....	....	3	25	1	12	7	.....	....	....
8	1	2	2	....	....	2	14	10	14	....	....	....	19	28	4	116	93	23	2	....
2	.....	.....	.....	.....	.....	1	2	4	6	....	....	....	1	9	17	6	6	.....	....	....
8	.....	3	2	....	....	13	22	44	34	....	1	....	19	86	13	67	132	33	....	....
.....	.....	.....	.....	.....	.....	.....	1	5	.....	.....	.....	.....	.....	.....	13	6	1	3	....	....
33	13	5	9	1	2	38	38	96	114	....	....	....	21	141	109	527	517	101	1	2
36	15	3	2	....	....	17	31	72	52	3	2	....	31	206	72	192	279	87	....	2
2	1	....	1	....	....	.....	.....	3	1	....	....	....	.....	12	.....	1	.....	7	....	....
.....	1	....	....	....	....	.....	3	4	3	....	....	....	7	16	.....	3	13	1	....	....
1	.....	2	....	....	....	1	4	4	2	....	1	....	5	32	1	4	2	4	....	....
1	.....	.....	.....	1	....	.....	.....	.....	1	.....	.....	.....	1	1	.....	.....	1	1	....	....
15	7	3	2	....	....	3	4	13	2	1	....	....	14	57	4	9	57	14	....	....
10	3	12	....	....	....	.....	2	9	7	3	4	....	10	27	.....	.....	.....	.....	....	....
1	.....	2	....	....	....	.....	.....	.....	.....	....	....	....	.....	4	.....	.....	.....	.....	....	....
2,160	848	453	193	30	32	626	1,435	3,462	4,147	193	518	50	4,585	12,464	1,352	3,461	5,317	2,591	22	7

TABLE 32.—Monthly Arrivals of Immigrants, by Occupation and Destination, at the Port of St. John, for the Fiscal Year 1928-29

Occupation and Destination	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Totals
Farming class..	4,172	9	.....	.....	2	1	.....	.....	462	260	324	2,784	8,014
Labouring class	74	1	1	1	1	.....	1	1	76	60	83	291	590
Mechanics.....	110	2	.....	.....	.....	.....	.....	1	85	98	125	364	785
Trading and clerical classes	53	1	.....	.....	.....	1	.....	.....	94	98	99	200	546
Mining class....	20	.....	.....	.....	.....	.....	.....	.....	12	16	6	36	90
Female domestic servants..	332	9	12	7	8	8	8	6	255	125	141	358	1,269
Other classes...	271	9	1	9	1	.....	1	1	536	234	289	400	1,752
Totals.....	5,032	31	14	17	12	10	10	9	1,520	891	1,067	4,433	13,046
Nova Scotia...	35	1	.....	.....	1	.....	2	3	18	1	1	16	78
New Brunswick	71	1	.....	1	1	3	.....	1	21	32	25	74	230
Prince Edward Island.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	1	2
Quebec.....	306	10	7	7	9	2	6	3	200	189	177	444	1,360
Ontario.....	923	12	6	3	1	5	1	2	568	343	426	1,431	3,721
Manitoba.....	2,656	.....	.....	6	.....	.....	.....	.....	242	97	136	1,481	4,618
Saskatchewan..	467	2	.....	.....	.....	.....	.....	.....	173	98	127	353	1,220
Alberta.....	409	5	.....	.....	.....	.....	.....	.....	173	80	83	436	1,186
British Columbia....	165	.....	.....	.....	.....	.....	1	.....	125	51	92	196	630
Yukon Territory.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1
Totals.....	5,032	31	14	17	12	10	10	9	1,520	891	1,067	4,433	13,046

TABLE 33.—Monthly Arrivals of Immigrants, by Occupation and Destination, at the Port of Halifax, for the Fiscal Year 1928-29

Occupation and Destination	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Totals
Farming class..	9,197	3,493	2,364	2,067	5,026	585	406	321	426	425	672	4,987	29,969
Labouring class	174	49	37	35	47	54	53	57	149	132	183	322	1,292
Mechanics.....	218	80	86	66	50	63	54	81	158	151	162	321	1,490
Trading and clerical classes	106	34	20	10	18	19	19	27	87	73	77	135	625
Mining class....	21	3	11	2	1	6	1	1	15	12	10	26	109
Female domestic servants..	907	474	440	375	437	306	269	228	386	217	286	747	5,072
Other classes...	667	362	450	400	544	386	383	473	1,005	473	503	733	6,379
Totals.....	11,290	4,495	3,408	2,955	6,123	1,419	1,185	1,188	2,226	1,483	1,893	7,271	44,936
Nova Scotia....	144	45	53	65	46	42	40	17	66	26	49	75	668
New Brunswick	207	123	29	9	17	13	8	9	6	.....	23	71	515
Prince Edward Island.....	8	4	6	6	11	8	2	1	.....	6	.....	2	54
Quebec.....	767	273	243	177	260	204	221	233	459	312	372	763	4,284
Ontario.....	2,023	520	490	384	539	388	419	388	965	713	798	1,705	9,332
Manitoba.....	6,149	2,633	1,685	1,593	4,410	464	233	235	251	177	244	3,357	21,431
Saskatchewan..	980	380	412	420	394	96	81	99	187	89	127	526	3,791
Alberta.....	750	344	343	250	346	103	89	117	186	85	165	593	3,371
British Columbia....	262	173	147	51	100	101	92	89	106	75	115	179	1,490
Totals.....	11,290	4,495	3,408	2,955	6,123	1,419	1,185	1,188	2,226	1,483	1,893	7,271	44,936

TABLE 34.—Monthly Arrivals of Immigrants, by Occupation and Destination, at the Port of Quebec, for the Fiscal Year 1928-29

Occupation and Destination	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Totals
Farming class..	4,797	10,885	8,279	5,950	11,329	2,613	865	676	.....	.....	2	1	45,397
Labouring class	367	560	406	313	303	441	265	261	.....	2	.....	.....	2,918
Mechanics.....	402	608	537	401	331	482	363	259	.....	.....	.....	2	3,385
Trading and clerical classes	215	287	362	255	266	360	225	215	5	2	.....	2	2,194
Mining class....	35	80	50	63	75	77	36	33	.....	.....	.....	.....	449
Female domestic servants..	744	1,541	1,648	1,086	1,162	1,205	772	677	1	1	1	1	8,839
Other classes...	787	1,511	1,805	1,324	1,465	2,036	1,356	1,170	4	10	2	1	11,471
Totals.....	7,347	15,472	13,087	9,392	14,931	7,214	3,882	3,291	10	15	5	7	74,653
Nova Scotia....	24	65	42	55	40	39	26	11	.....	.....	.....	.....	302
New Brunswick	139	312	215	30	23	38	15	21	.....	.....	.....	.....	793
Prince Edward Island.....	1	4	5	2	1	3	1	.....	.....	.....	.....	.....	17
Quebec.....	636	1,387	1,322	882	785	1,152	799	760	2	3	.....	.....	7,728
Ontario.....	2,321	3,549	3,749	2,566	2,437	3,034	1,819	1,484	5	8	3	5	20,980
Manitoba.....	2,905	7,239	4,606	3,568	9,352	1,552	339	378	1	.....	1	.....	29,941
Saskatchewan..	507	1,208	1,411	975	989	515	337	214	.....	3	1	1	6,161
Alberta.....	546	1,273	1,257	994	1,007	532	315	245	1	1	.....	.....	6,171
British Columbia....	268	435	478	320	297	349	231	178	1	.....	.....	1	2,558
Yukon Territory.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Northwest Territories...	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Totals.....	7,347	15,472	13,087	9,392	14,931	7,214	3,882	3,291	10	15	5	7	74,653

TABLE 35.—Monthly Arrivals of Immigrants, by Racial Origin, at the Port of St. John, for the Fiscal Year 1928-29

Racial Origin	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Totals
Albanian.....	2	.....	.....	.....	.....	.....	.....	.....	.....	1	1	.....	4
Armenian.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1
Belgian.....	92	.....	2	.....	.....	.....	.....	.....	16	20	13	66	209
British—													
English.....	1,002	13	1	5	.....	2	2	3	322	252	312	1,331	3,245
Irish.....	265	.....	.....	.....	.....	.....	.....	.....	60	49	84	384	842
Scotch.....	537	2	.....	2	1	1	.....	1	253	181	217	846	2,041
Welsh.....	165	.....	.....	.....	.....	.....	.....	.....	25	8	22	107	327
Bulgarian.....	.....	.....	.....	.....	.....	.....	.....	.....	7	.....	.....	.....	7
Czech.....	17	.....	.....	.....	.....	.....	.....	.....	8	.....	.....	6	31
Dutch.....	125	.....	.....	.....	.....	.....	.....	.....	77	42	63	78	385
East Indian....	.....	.....	.....	.....	.....	.....	.....	.....	3	.....	.....	.....	3
Esthonian.....	2	.....	.....	.....	.....	.....	.....	.....	12	1	.....	1	16
Finnish.....	45	.....	.....	.....	.....	.....	.....	.....	83	28	33	59	248
French.....	34	.....	.....	.....	.....	.....	.....	.....	10	13	9	29	95
German.....	257	5	.....	.....	.....	.....	.....	.....	209	84	96	286	937
Greek.....	20	.....	.....	.....	.....	.....	.....	.....	30	6	4	9	69
Hebrew.....	22	.....	.....	.....	.....	.....	.....	.....	42	31	24	24	143
Italian.....	1	.....	.....	.....	.....	.....	.....	.....	24	13	5	14	57
Jugo-Slav.....	314	.....	.....	.....	.....	.....	.....	.....	33	10	19	55	431
Lettish.....	1	.....	.....	.....	.....	.....	.....	.....	3	2	1	1	8
Lithuanian.....	183	.....	.....	.....	.....	.....	.....	.....	5	6	1	41	236
Magyar.....	595	.....	.....	.....	.....	.....	.....	.....	41	17	44	176	873
Negro.....	.....	11	11	10	7	7	8	5	2	4	1	1	67
Persian.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Polish.....	227	.....	.....	.....	.....	.....	.....	.....	63	25	30	168	513
Portuguese.....	.....	.....	.....	.....	4	.....	.....	.....	3	.....	.....	.....	7
Roumanian.....	14	.....	.....	.....	.....	.....	.....	.....	3	.....	1	13	31
Russian.....	36	.....	.....	.....	.....	.....	.....	.....	13	12	10	14	85
Ruthenian.....	389	.....	.....	.....	.....	.....	.....	.....	94	54	38	378	953

TABLE 35.—Monthly Arrivals of Immigrants, by Racial Origin, at the Port of St. John, for the Fiscal Year 1928-29—*Concluded*

Racial Origin	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Totals
Scandinavian—													
Danish	123								25	3	7	93	251
Norwegian	35								10		11	43	99
Swedish	22								22	11	9	27	91
Serbian	29											2	31
Slovak	454								6	14	8	132	614
Swiss	22								8	2	4	45	81
Syrian	1								8	1		3	13
Turkish										1			1
Totals	5,032	31	14	17	12	10	10	9	1,520	891	1,067	4,433	13,046

TABLE 36.—Monthly Arrivals of Immigrants, by Racial Origin, at the Port of Quebec, for the Fiscal Year 1928-29

Racial Origin	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Totals
Albanian	2	7	5	3	3		2	1					23
Armenian				1									1
Belgian	106	126	80	41	43	34	44	33					507
Bohemian		1				1							2
British—													
English	2,023	3,417	2,915	1,941	4,152	2,031	1,082	893	7	8		1	18,470
Irish	796	1,278	1,227	657	1,079	824	385	316		1			6,563
Scotch	1,201	1,795	2,022	1,190	3,172	1,206	745	597	1		2	2	11,933
Welsh	188	284	304	196	839	157	66	49					2,083
Bulgarian	11	4	6	17	17	14	15	9					93
Croatian	95	35	86	62	76	28	15	9					406
Czech	138	91	139	37	71	19	11	7					513
Dalmatian						1							1
Dutch	126	60	67	33	67	93	45	25	1				517
Esthonian	1	10	8	3	14	15	3	1					55
Finnish	54	176	191	99	105	184	133	110					1,052
French	37	68	70	60	37	52	34	37		1			396
German	224	901	815	601	686	535	359	372	1	1	2	1	4,498
Greek	10	29	30	25	69	60	71	61					355
Hebrew	13	106	231	119	82	113	133	155				1	953
Italian	4	5	25	15	11	17	32	14					123
Jugo-Slav	292	367	222	149	813	296	8	21					2,168
Lettish		7	6	10	8	4		3					38
Lithuanian	69	158	182	128	71	40	12	10					670
Magyar	236	1,230	680	507	647	293	158	108		3			3,862
Maltese			2		2	1	2	6					13
Moravian			1			2							3
Polish	380	1,360	900	973	689	233	122	119			1		4,777
Portuguese		1	1	1									3
Roumanian	7	60	21	23	13	16	14	4					158
Russian	18	187	96	132	88	33	32	21				2	609
Ruthenian	856	2,188	1,888	1,690	1,366	391	144	124					8,647
Scandinavian—													
Danish	215	384	143	133	108	86	47	30					1,146
Icelandic	2	2	8			8		1					21
Norwegian	71	153	86	56	52	65	24	26					533
Swedish	56	90	102	51	62	65	44	32		1			503
Serbian	7	64	33	32	40	14	16	4					210
Slovak	86	759	451	378	427	243	49	55					2,448
Spanish			1					7					8
Swiss	23	69	33	27	19	36	34	24					265
Syrian			9	2	3	4	1	7					26
Turkish			1										1
Totals	7,347	15,472	13,087	9,392	14,931	7,214	3,882	3,291	10	15	5	7	74,653

TABLE 37.—Monthly Arrivals of Immigrants, by Racial Origin, at the Port of Halifax, for the Fiscal Year 1928-29

Racial Origin	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Totals
Albanian	1												1
Arabian												1	1
Armenian		1		1							6	1	9
Belgian	135	82	34	22	25	11	17	9	7	17	23	120	502
Bohemian	5				1								6
British—													
English	1,422	58	51	51	2,438	15	26	25	351	334	485	1,276	6,532
Irish	867	4	6	3	112	2	1	4	94	78	130	374	1,675
Scotch	767	2	4	4	42	2	6		253	86	265	466	1,897
Welsh	190	2	1		345				22	40	45	101	746
Bulgarian	25	3	7	9	14	6	15	5	23	33	12	15	167
Croatian	272	41	17	51	43	2	1	6	29	11	9	93	575
Czech	197	20	24	7	4			5	19	4	2	20	302
Dutch	287	132	50	25	32	16	17	17	21	2	10	73	682
Esthonian	14	1		1					4			1	21
Finnish	271	244	219	139	264	247	255	186	119	105	97	165	2,311
French	50	7	3	8	7	1	2	5	18	16	22	71	210
German	1,581	1,174	1,067	625	737	239	150	204	241	115	81	1,397	7,611
Greek	18	7	15	9	16	3	8	11	37	61	57	58	300
Hebrew	194	111	108	159	119	189	153	253	275	180	171	184	2,096
Italian	5	3			1			5	14	11	10	7	56
Jugo-Slav	72	4	5	26	29	2	1	1	6	1	5	61	213
Lettish	7	5	2		2	1			2		2	6	27
Lithuanian	210	70	82	92	101	4	2	12	14	8	10	65	670
Magyar	379	164	64	87	72	10	15	68	161	72	68	330	1,490
Maltese						1			1	1		2	5
Moravian		1											1
Negro								2	3				5
Polish	736	337	330	413	318	103	62	52	152	51	49	301	2,904
Portuguese	1												1
Roumanian	6	20		5	2			2	8	5	6	15	69
Russian	30	13	4	54	32	13		3	15	5	2	6	177
Ruthenian	1,618	916	555	748	643	154	61	68	140	77	83	784	5,847
Scandinavian—													
Danish	435	330	171	78	155	97	92	64	24	47	66	324	1,883
Icelandic		1										2	3
Norwegian	341	229	149	60	153	106	57	63	31	27	50	474	1,740
Swedish	610	344	321	161	305	181	216	90	51	49	86	261	2,675
Serbian	49	9	4	10	11	3	3	5	15	6	6	24	145
Slovak	452	134	109	102	95	9	23	20	64	41	28	157	1,234
Spanish							2						2
Swiss	41	26	6		4	2		1	7		3	36	126
Syrian	2			5	1			2	5		4		19
Totals	11,290	4,495	3,408	2,955	6,123	1,419	1,185	1,188	2,226	1,483	1,893	7,271	44,936

TABLE 38.—Statement of Immigration, showing Racial Origin, by Occupation and Destination, at the Port of St. John, for the Fiscal Year 1928-29

Racial Origin	Totals	Occupation							Destination									
		Farming Class	Labouring Class	Mechanics	Trading and Clerical Classes	Mining Class	Female Domestic Servants	Other Classes	Nova Scotia	New Brunswick	Prince Edward Island	Quebec	Ontario	Manitoba	Saskatchewan	Alberta	British Columbia	Yukon Territory
Albanian	4	3	1									2		2				
Armenian	1							1					1					
Belgian	209	121	6	21		1	7	53				32	69	85	13	10		
British—																		
English	3,245	1,684	209	315	238	43	254	502	40	76	1	543	1,285	440	272	339	249	
Irish	842	436	51	65	80		121	89	5	20		96	468	82	68	74	29	
Scotch	2,041	755	185	252	161	29	338	321	22	87		239	952	196	169	208	167	1
Welsh	327	208	28	9	12	13	21	36		10		28	141	44	39	45	20	
Bulgarian	7	3		1				3					5			2		
Czech	31	31											1	12	8	10		
Dutch	385	310	8	7	3		34	23	1			5	54	108	163	52	2	
East Indian	3							3									3	
Esthonian	16	7					4	5						6	1	8	1	
Finnish	248	124	27	6	1	1	62	27				51	122	6	7	5	57	
French	95	44	5	16	6		5	19	1			56	14	8	12	3	1	
German	937	714	7	23	11		83	99				31	64	587	166	76	13	
Greek	69	53	3	1			5	7	1	1		7	52	1	1	3	3	
Hebrew	143	34	8	32	16		23	30		2		70	51	8	7	4	1	
Italian	57	13	21	3		1	4	15				12	33	2		5	5	
Jugo-Slav	431	349					17	65				9	58	311	9	14	30	
Lettish	8	4					1	3		1			1	4		2		
Lithuanian	236	209					17	10				1	2	218	11	4		
Magyar	873	737					19	117				23	72	663	48	65	2	
Negro	67	1	4				55	7	4	2		40	21					
Persian	1					1						1						
Polish	513	391		3	1		54	64				17	48	359	38	48	3	
Portuguese	7	1			3		3					7						
Roumanian	31	23		5			1	2				1	7	22	1			
Russian	85	48		2	2		3	30		5		4	11	43	6	15	1	
Ruthenian	953	737	3	1			83	129				9	67	688	99	87	3	

Scandinavian—																		
Danish	251	192	5	5	5	.....	17	27	.....	16	.....	32	29	78	34	53	9	.....
Norwegian	99	75	8	3	1	.....	10	2	.....	3	.....	3	5	16	22	33	17	.....
Swedish	91	63	10	10	3	1	3	1	2	7	.....	6	9	53	5	6	3	.....
Serbian	31	31	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	30	.....	.....	.....	.....
Slovak	614	548	.....	.....	.....	.....	17	49	2	.....	.....	9	51	516	16	12	8	.....
Swiss	81	64	1	5	3	.....	6	2	.....	.....	1	20	24	30	1	2	3	.....
Syrian	13	1	.....	.....	.....	.....	2	10	.....	.....	.....	6	2	.....	4	1	.....	.....
Turkish	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....
Totals	13,046	8,014	590	785	546	90	1,269	1,752	78	230	2	1,360	3,721	4,618	1,220	1,186	630	1

TABLE 39.—Statement of Immigration, showing Racial Origin by Occupation and Destination, at the Port of Halifax, for the Fiscal Year 1928-29

Racial Origin	Totals	Occupation							Destination								
		Farming Class	Labouring Class	Mechanics	Trading and Clerical Classes	Mining Class	Female Domestic Servants	Other Classes	Nova Scotia	New Brunswick	Prince Edward Island	Quebec	Ontario	Manitoba	Saskatchewan	Alberta	British Columbia
Albanian	1	1											1				
Arabian	1							1					1				
Armenian	9	5						4					9				
Belgian	502	332	5	8			13	144	4			83	222	153	23	15	2
Bohemian	6	6											1	5			
British—																	
English	6,532	4,851	281	289	167	49	308	587	327	82	11	586	1,371	3,393	258	314	190
Irish	1,675	1,042	96	57	61	2	259	158	41	68		160	897	306	99	67	37
Scotch	1,897	790	185	150	95	24	359	294	93	66		241	961	227	101	144	64
Welsh	746	608	11	17	13	18	31	48	20	30	1	38	136	439	18	47	17
Bulgarian	167	89	42	1			16	19					166		1		
Croatian	575	478	2				20	75	11			7	60	405	28	39	25
Czech	302	244					16	42				11	47	217	17	10	
Dutch	682	519	7	8	5		24	119	3	2		38	223	257	35	89	35
Esthonian	21	12					7	2						16	1	4	
Finnish	2,311	1,005	83	42	4		898	279	4	18		557	1,467	43	25	34	163
French	210	109	16	39	2		14	30	4	2		108	62	10	18	5	1
German	7,611	5,735	54	218	61	4	682	857	12	3	2	493	539	5,213	787	521	41
Greek	300	199	54	4	4		22	17	1			23	257	3	9	3	4
Hebrew	2,096	168	207	531	166		403	621	7	2	6	673	777	426	124	50	31
Italian	56	29	3	3	2		4	15	2			11	27	4	1	6	5
Jugo-Slav	213	158	1	1			6	47				5	30	33	21	14	10
Lettish	27	18	1				5	3				1	3	19	2	2	
Lithuanian	670	530		1			63	76	2			52	66	452	58	39	1
Magyar	1,490	856	4				74	556	19	1		152	307	659	242	104	6
Maltese	5	2			1			2					3	1			1
Moravian	1						1						1				
Negro	5						5					3	2				
Polish	2,904	2,003	12	5	6		300	578	9			164	335	1,849	329	215	3
Portuguese	1	1												1			

Roumanian	69	36	.....	.....	.....	.....	12	21	.....	.....	.....	13	11	28	15	2	.....
Russian	177	113	7	.....	.....	.....	17	40	1	.....	.....	9	16	55	80	11	5
Ruthenian	5,847	4,655	15	1	.....	.....	613	563	18	.....	.....	158	278	4,323	550	514	6
Scandinavian—																	
Danish	1,883	1,193	32	64	11	1	249	333	55	181	33	249	200	645	196	284	40
Icelandic	3	.....	.....	.....	.....	.....	3	.....	.....	.....	.....	.....	.....	3	.....	.....	.....
Norwegian	1,740	1,051	74	25	12	7	274	297	4	13	1	66	85	406	440	455	270
Swedish	2,675	1,990	97	17	9	4	321	237	7	47	.....	230	511	843	220	298	519
Serbian	145	121	.....	.....	.....	.....	5	19	.....	.....	.....	1	44	83	10	5	2
Slovak	1,234	911	.....	.....	.....	.....	40	283	13	.....	.....	102	191	779	73	73	3
Spanish	2	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	2	.....	.....	.....	.....	.....
Swiss	126	94	2	9	5	.....	8	8	1	.....	.....	46	18	35	10	7	9
Syrian	19	15	1	.....	1	.....	.....	2	10	.....	.....	2	7	.....	.....	.....	.....
Totals	44,936	29,969	1,292	1,490	625	109	5,072	6,379	668	515	54	4,284	9,332	21,431	3,791	3,371	1,490

TABLE 40.—Statement of Immigration, showing Racial Origin by Occupation and Destination, at the Port of Quebec, for the Fiscal Year 1928-29

Racial Origin	Totals	Occupation							Destination									
		Farming Class	Labouring Class	Mechanics	Trading and Clerical Classes	Mining Class	Female Domestic Servants	Other Classes	Nova Scotia	New Brunswick	Prince Edward Island	Quebec	Ontario	Manitoba	Saskatchewan	Alberta	British Columbia	Yukon Territory	Northwest Territories
Albanian	23	18	2				3					4	3	12	1	3			
Armenian	1						1						1						
Belgian	507	223	17	48	10	6	22	181	4			141	190	98	18	44	12		
Bohemian	2						1	1					2						
British—																			
English	18,470	9,647	1,100	1,509	863	232	1,840	3,279	101	288	4	2,333	7,263	4,253	1,504	1,618	1,106		
Irish	6,563	3,254	364	300	366	8	1,297	974	29	97	4	1,025	3,407	883	373	544	201		
Scotch	11,933	5,318	810	805	643	123	2,052	2,182	107	271	4	1,518	5,042	3,126	564	719	581		1
Welsh	2,083	1,475	59	94	32	47	115	261	8	56	2	149	538	837	155	253	84	1	
Bulgarian	93	56	20	2			2	13				2	90		1				
Croatian	406	314		1			11	80				27	91	224	25	34	5		
Czech	513	441		1			17	54	1			7	101	340	35	24	5		
Dalmatian	1						1						1						
Dutch	517	362	8	14	5		41	87	2			33	140	139	137	58	8		
Esthonian	55	30					24	1					9	36	1	7	2		
Finnish	1,052	433	173	32	10	15	312	77	1			372	570	14	7	11	77		
French	396	130	45	53	28	10	20	110	6		1	242	64	30	26	18	9		
German	4,498	2,888	38	154	60		613	745	6	2	1	272	491	2,438	796	431	61		
Greek	355	284	6	5	4		26	30				15	310	6	11	2	11		
Hebrew	953	106	58	199	92		144	354	6	6		375	407	52	42	48	17		
Italian	123	46	11	7	3	1	9	46	1			26	69	7	2	6	12		
Jugo-Slav	2,168	1,964	1				59	144				35	137	1,811	30	96	59		
Lettish	38	22		1			7	8					10	23		4	1		
Lithuanian	670	525				1	74	70	2			36	27	510	53	35	7		
Magyar	3,862	2,811	6	1	5		160	879	9			193	491	2,239	620	306	4		
Maltese	13	5	2	1	2			3				7	5	1					
Moravian	3	1						2					2	1					
Polish	4,777	3,772	17	26	2		473	487	6	1		115	411	3,408	437	376	23		
Portuguese	3	2						1					2	1					
Roumanian	158	109	2	2	2		11	32		1		11	25	102	14	3	2		

Russian	609	498	2	4	1		25	79	1	1		28	47	421	57	44	10		
Ruthenian	8,647	6,906	11	1			1,068	661	8			108	410	6,205	918	964	34		
Scandinavian—																			
Danish	1,146	810	36	63	24	1	125	87		65		267	139	403	61	179	32		
Icelandic	21	6	2	2			4	7						18	2		1		
Norwegian	533	349	44	17	2	1	73	47			1	53	58	125	94	110	92		
Swedish	503	344	61	20	7	4	26	41	1	5		49	100	205	21	57	65		
Serbian	210	168		1	1		5	35				5	43	139	16	6	1		
Slovak	2,448	1,959	2				138	349	2			140	218	1,790	130	146	22		
Spanish	8	1						7				7	1						
Swiss	265	112	21	21	30		31	50				124	55	42	10	20	14		
Syrian	26	8		1	2		8	7	1			9	10	1		5			
Turkish	1						1							1					
Totals	74,653	45,397	2,918	3,385	2,194	449	8,839	11,471	302	793	17	7,728	20,980	29,941	6,161	6,171	2,558	1	1

TABLE 41.—Admissions and Rejections, by Divisions, for the Fiscal Year 1928-29

—	Ocean Ports		International Boundary Ports		Ocean Ports and International Boundary Ports	
	Admissions	Rejections	Admissions	Rejections	Admissions	Rejections
Eastern Division—						
Quebec	74,653	80	.....	.....	.....	.....
Halifax	44,936	94	.....	.....	.....	.....
St. John	13,046	30	.....	.....	.....	.....
North Sydney	1,173	11	.....	.....	.....	.....
Montreal	340	85	.....	.....	.....	.....
Sydney	15	.....	.....	.....	.....	.....
New York	1,397	11	.....	.....	.....	.....
Boston	16	2	.....	.....	.....	.....
International Boundary Ports	.....	.....	18,549	16,883	.....	.....
Totals	135,576	313	18,549	16,883	154,125	17,196
Western Division—						
International Boundary Ports	.....	.....	9,273	662	9,273	662
Pacific Division—						
Vancouver	1,115	32	.....	.....	.....	.....
Victoria	422	15	.....	.....	.....	.....
International Boundary Ports	.....	.....	2,738	565	.....	.....
Totals	1,537	47	2,738	565	4,275	612
Other Ocean Ports	49	.....	.....	.....	49	.....
Grand totals	137,162	360	30,560	18,110	167,722	18,470

TABLE 42.—Rejections, at Ocean Ports, by Causes and Nationalities, from 1902-03 to 1928-29

—	Fiscal Years																	
	1902-03 to 1912-13	1913-14	1914-15	1915-16	1916-17	1917-18	1918-19	1919-20	1920-21	1921-22	1922-23	1923-24	1924-25	1925-26	1926-27	1927-28	1928-29	Totals
By Causes																		
Medical causes	4,162	398	319	34	30	12	19	21	99	60	37	130	83	40	95	104	94	5,737
Civil causes	5,094	1,429	679	129	144	59	51	641	854	1,023	595	862	948	226	594	215	266	13,809
Totals	9,256	1,827	998	163	174	71	70	662	953	1,083	632	992	1,031	266	689	319	360	19,546
By Nationalities																		
British	1,240	171	169	42	28	5	11	108	193	153	98	187	199	109	209	150	154	3,226
American	175	12	29	28	15	11	9	8	11	7	4	6	11	.....	5	2	3	336
Other countries	7,841	1,644	800	93	131	55	50	546	749	923	530	799	821	157	475	167	203	15,984
Totals	9,256	1,827	998	163	174	71	70	662	953	1,083	632	992	1,031	266	689	319	360	19,546

TABLE 43.—Deportations, after having been admitted, by Causes, Nationalities and Provinces, from 1902-03 to 1928-29

—	Fiscal Years																	
	1902-03 to 1912-13	1913-14	1914-15	1915-16	1916-17	1917-18	1918-19	1919-20	1920-21	1921-22	1922-23	1923-24	1924-25	1925-26	1926-27	1927-28	1928-29	Totals
By Causes																		
Medical causes	2,296	570	379	206	98	39	70	123	133	313	282	649	420	410	470	519	650	7,627
Public causes	2,853	715	789	635	161	91	103	158	236	950	679	775	543	506	354	430	444	10,422
Criminality	1,083	376	404	329	277	274	236	334	586	630	543	511	520	453	447	426	441	7,870
Other civil causes	530	163	128	68	60	84	35	22	52	105	76	93	58	189	149	257	194	2,263
Accompanying deported persons	145	10	34	5	9	39	10	18	37	48	52	78	145	158	165	254	235	1,442
Totals	6,907	1,834	1,734	1,243	605	527	454	655	1,044	2,046	1,632	2,106	1,686	1,716	1,585	1,886	1,964	29,624
By Nationalities																		
British	4,358	952	877	602	186	36	99	184	295	1,107	888	1,377	985	899	808	1,047	1,083	15,783
American	1,066	405	461	437	324	407	279	392	616	725	520	417	321	330	351	297	294	7,642
Other countries	1,483	477	396	204	95	84	76	79	133	214	224	312	380	487	426	542	587	6,199
Totals	6,907	1,834	1,734	1,243	605	527	454	655	1,044	2,046	1,632	2,106	1,686	1,716	1,585	1,886	1,964	29,624
By Provinces																		
Maritime Provinces	147	45	55	48	19	18	22	22	52	74	54	38	32	43	48	48	70	835
Quebec	1,589	371	397	236	108	123	96	118	174	297	277	301	206	233	233	240	255	5,254
Ontario	2,896	574	543	461	233	166	162	247	375	895	587	547	675	620	581	646	600	10,808
Manitoba	.....	334	199	143	40	59	21	40	66	228	180	802	242	195	177	279	403	
Saskatchewan	1,783	59	85	96	54	37	31	30	52	115	132	110	115	113	118	197	173	8,779
Alberta	.....	164	224	114	34	30	19	57	88	173	138	102	134	178	169	260	187	
British Columbia	491	287	228	145	116	91	103	141	237	264	264	206	282	334	259	216	276	3,940
Yukon Territory	1	.....	3	.....	1	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	8
Totals	6,907	1,834	1,734	1,243	605	527	454	655	1,044	2,046	1,632	2,106	1,686	1,716	1,585	1,886	1,964	29,624

TABLE 44.—Immigration from the United States, showing Racial Origin, Sex for the Fiscal

Racial Origin	Nova Scotia				New Brunswick				Prince Edward Island				Quebec				Ontario			
	18 years and over		Under 18 years		18 years and over		Under 18 years		18 years and over		Under 18 years		18 years and over		Under 18 years		18 years and over		Under 18 years	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Albanian	....	....	....	....	....	....	....	....	....	....	....	....	3	1	....	2	.....	.....	.....	.....
Arabian	....	....	....	....	....	....	....	....	....	....	....	....	.....	.....	.....	.....	1	.....	.....	.....
Armenian	....	....	....	....	....	....	....	....	....	....	....	....	1	.....	....	1	5	1	1	.....
Belgian	1	2	....	....	....	....	....	....	....	....	....	....	2	3	....	....	26	12	4	5
Bohemian	....	....	....	....	....	....	....	....	....	....	....	....	1	2	....	....	11	4	3	4
British—																				
English	24	24	15	16	96	48	49	43	5	6	5	5	436	256	124	102	2,449	1,129	522	456
Irish	12	5	3	6	29	8	5	13	2	2	3	....	160	79	29	25	997	443	186	183
Scotch	13	17	8	7	19	8	6	9	4	1	4	2	120	66	31	28	904	385	186	151
Welsh	1	2	....	....	2	1	....	....	....	....	....	....	9	4	....	4	95	26	11	11
Bulgarian	....	....	....	....	....	....	....	....	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....
Croatian	....	....	....	....	....	....	....	....	....	....	....	....	.....	.....	.....	.....	7	5	5	3
Czech	....	....	....	....	....	....	....	....	....	....	....	....	.....	.....	.....	.....	2	.....	1	.....
Dutch	1	....	....	....	....	....	2	2	....	....	....	....	21	7	2	5	150	77	230	36
East Indian	....	....	....	....	....	....	....	....	....	....	....	....	.....	.....	.....	.....	1	.....	.....	.....
Finnish	....	....	....	....	....	1	....	....	....	....	....	....	8	2	....	....	27	12	3	4
French	4	3	1	6	38	36	39	43	2	2	3	2	641	499	679	635	378	200	89	74
German	6	3	2	....	3	1	....	1	1	1	....	....	107	52	12	12	896	375	135	109
Greek	....	....	....	....	....	....	....	....	....	....	....	....	6	2	....	1	32	3	5	6
Hebrew	1	2	....	....	....	1	....	....	....	....	....	....	82	42	19	13	176	99	34	21
Italian	....	....	....	....	....	1	1	3	....	....	....	....	34	7	6	7	115	26	20	17
Japanese	....	....	....	....	....	....	....	....	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....
Jugo-Slav	....	....	....	....	....	....	....	....	....	....	....	....	.....	.....	.....	.....	11	5	.....	2
Lettish	....	....	....	....	....	....	....	....	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....
Lithuanian	....	....	....	....	....	....	....	....	....	....	....	....	2	1	....	....	4	4	.....	1
Magyar	....	....	....	....	....	....	....	....	....	....	....	....	2	3	1	1	18	14	11	3
Maltese	....	....	....	....	....	....	....	....	....	....	....	....	.....	.....	.....	.....	1	.....	.....	.....
Moravian	....	....	....	....	....	....	....	....	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....
Negro	....	....	....	....	....	....	....	1	....	....	....	....	21	15	....	2	140	60	11	6
North American Indian	....	....	....	....	....	....	....	....	....	....	....	....	2	1	1	3	3	5	.....	3
Polish	....	1	....	....	....	1	....	....	....	....	....	....	3	2	....	2	72	35	12	9
Portuguese	....	....	....	....	....	....	....	....	....	....	....	....	2	.....	.....	.....	3	1	2	.....
Roumanian	....	....	....	....	....	....	....	....	....	....	....	....	1	2	....	....	12	9	3	1
Russian	....	....	....	....	....	....	....	....	....	....	....	....	11	2	5	1	21	4	.....	3
Ruthenian	....	....	....	....	....	....	....	....	....	....	....	....	.....	.....	1	....	5	3	.....	1
Scandinavian—																				
Danish	....	....	....	....	1	....	....	....	....	....	....	....	16	1	1	1	54	20	4	8
Icelandic	....	....	....	....	....	....	....	....	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....
Norwegian	....	....	....	....	....	....	....	....	....	....	....	....	15	5	1	....	91	22	12	16
Swedish	1	....	1	1	1	1	....	....	....	....	....	....	18	7	3	3	142	47	11	6
Serbian	....	....	....	....	....	....	....	....	....	....	....	....	.....	.....	.....	.....	7	4	1	.....
Slovak	....	....	....	....	....	....	....	....	....	....	....	....	3	1	3	....	10	4	.....	2
Spanish	....	....	....	....	1	....	....	....	....	....	....	....	3	2	....	....	11	7	9	5
Spanish American	....	....	....	....	....	....	....	....	....	....	....	....	.....	.....	.....	1	1	.....	.....	.....
Swiss	....	1	....	....	....	....	....	....	....	....	....	....	8	4	....	2	37	17	1	2
Syrian	1	1	....	1	....	1	3	....	....	....	....	....	2	3	1	4	10	7	4	6
Turkish	....	....	....	....	....	....	....	....	....	....	....	....	.....	.....	.....	.....	2	.....	.....	2
Totals	65	61	30	37	190	108	105	115	14	12	15	9	1,740	1,071	919	855	6,927	3,065	1,316	1,156

and Age 18 Years and Over, and Under 18 Years, by Province of Destination, Year 1928-29

Manitoba				Saskatchewan				Alberta				British Columbia				Yukon Territory				Not given			
18 years and over		Under 18 years		18 years and over		Under 18 years		18 years and over		Under 18 years		18 years and over		Under 18 years		18 years and over		Under 18 years		18 years and over		Under 1 years	
M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
2	4	.....	.....	6	5	.....	1	1	2	.....	.....	1	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
5	1	.....	.....	12	3	1	5	14	4	3	6	3	2	2	.....	.....	.....	.....	.....	.....	.....	.....	.....
186	88	30	43	343	157	91	70	645	325	193	167	495	305	121	104	6	1	.....	.....	1	.....	.....	.....
89	32	16	20	200	66	38	49	368	154	105	99	174	99	34	32	1	.....	.....	.....	1	.....	.....	.....
89	34	12	22	164	56	41	37	304	138	73	81	216	117	53	43	4	.....	.....	.....	.....	.....	.....	.....
7	4	1	2	15	2	2	3	33	11	7	9	26	8	4	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1	.....	.....	1	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
21	7	5	7	49	19	10	11	83	39	32	35	31	24	15	18	2	..	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
5	3	1	.....	4	2	1	.....	5	4	.....	5	6	5	.....	1	1	.....	.....	.....	.....	.....	.....	.....
50	23	17	9	82	39	25	26	97	47	29	26	44	24	13	9	.....	.....	.....	.....	.....	.....	.....	.....
116	44	22	16	421	169	95	101	470	225	132	141	107	67	35	22	4	.....	.....	.....	.....	.....	.....	.....
1	.....	1	2	.....	.....	.....	.....	1	1	2	1	4	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
13	8	2	1	5	3	.....	.....	7	4	1	3	6	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
4	1	.....	.....	2	1	.....	.....	6	2	1	4	6	6	.....	2	.....	.....	.....	.....	.....	.....	.....	.....
1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1	.....	.....	.....	5	1	3	1	.....	.....	.....	.....	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	4	.....	.....	.....	1	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....
1	1	.....	.....	13	4	2	6	7	2	5	10	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
9	3	1	.....	.....	2	.....	.....	.....	4	.....	.....	2	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	2	1	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
18	4	6	2	21	8	9	3	16	4	2	9	5	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1	.....	.....	.....	6	4	1	1	3	2	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
2	1	1	.....	36	23	27	30	31	20	21	21	11	5	2	5	2	.....	.....	.....	.....	.....	.....	.....
8	2	5	2	4	1	1	.....	5	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
10	.....	2	1	29	13	17	8	55	37	17	23	16	9	4	4	.....	.....	.....	.....	.....	.....	.....	.....
8	3	1	1	4	2	.....	.....	.....	1	.....	.....	1	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
57	24	15	13	267	99	84	77	288	99	73	57	49	30	8	14	1	.....	.....	.....	2	.....	.....	.....
44	13	8	7	117	33	26	16	156	48	41	34	39	28	10	10	.....	.....	.....	.....	2	.....	.....	.....
.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	5	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	2	.....	.....	1	5	2	5	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1	.....	.....	.....	2	2	.....	.....	2	.....	.....	.....	2	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
3	1	.....	.....	8	1	.....	.....	28	10	14	5	7	4	.....	3	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
755	301	147	149	1,824	717	474	446	2,636	1,186	757	738	1,265	754	302	270	21	1	.....	.....	7	.....	.....	.....

TABLE 45.—Immigration, via Ocean Ports, showing Racial Origin, Sex and Age Fiscal Year

Racial Origin	Nova Scotia				New Brunswick				Prince Edward Island				Quebec				Ontario			
	18 years and over		Under 18 years		18 years and over		Under 18 years		18 years and over		Under 18 years		18 years and over		Under 18 years		18 years and over		Under 18 years	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Albanian	....	....	....	....	....	....	....	....	....	....	....	....	5	.....	1	.....	3	.....	1	.....
Arabian	....	....	....	....	....	....	....	....	....	....	....	....	.....	.....	.....	.....	.....	.....	1	.....
Armenian	....	....	....	....	....	....	....	....	....	....	....	....	.....	2	1	.....	1	7	1	2
Belgian	4	3	1	....	....	....	....	....	....	....	....	....	137	76	22	23	164	165	80	73
Bohemian	....	....	....	....	....	....	....	....	....	....	....	....	.....	.....	.....	.....	1	1	1	.....
British—																				
English	408	287	166	145	137	117	128	114	11	2	4	2	1,327	1,014	1,150	314	4,091	3,219	2,000	1,092
Irish	34	19	16	6	50	34	45	56	3	1	....	....	609	449	155	83	2,286	1,594	505	415
Scotch	83	58	63	34	78	66	214	66	3	2	....	....	700	776	354	207	2,382	2,719	1,058	853
Welsh	18	4	3	5	20	21	24	31	2	1	....	....	82	55	64	20	344	207	163	162
Bulgarian	....	....	....	....	....	....	....	....	....	....	....	....	2	.....	.....	.....	215	40	10	11
Croatian	1	3	....	7	....	....	....	....	....	....	....	....	3	16	8	7	55	50	32	22
Czech	....	1	....	....	....	....	....	....	....	....	....	....	2	9	6	1	94	29	18	8
Dalmatian	....	....	....	....	....	....	....	....	....	....	....	....	.....	.....	.....	.....	.....	1	.....	.....
Dutch	5	....	....	1	2	....	....	....	....	....	....	....	44	19	11	3	187	116	73	44
East Indian	....	....	....	....	....	....	....	....	....	....	....	....	.....	.....	.....	.....	.....	1	.....	.....
Esthonian	....	....	....	....	....	....	....	....	....	....	....	....	.....	.....	.....	.....	3	5	.....	1
Finnish	3	2	....	....	7	10	....	1	....	....	....	....	476	447	33	40	955	930	133	156
French	9	8	3	3	....	2	....	....	1	....	....	....	241	124	25	24	86	45	9	7
German	10	7	....	1	3	2	....	....	3	....	....	....	522	192	61	49	408	434	147	152
Greek	1	1	....	....	....	1	....	....	....	....	....	....	22	24	3	.....	549	49	18	1
Hebrew	7	5	2	....	3	6	....	1	1	1	1	3	344	480	168	180	345	464	244	223
Italian	1	7	5	4	....	....	....	....	....	....	....	....	34	62	45	17	80	178	130	93
Japanese	....	....	....	....	....	....	....	....	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....
Jugo-Slav	....	....	....	....	....	....	....	....	....	....	....	....	36	6	5	6	72	79	45	34
Lettish	....	....	....	....	1	....	....	....	....	....	....	....	1	.....	.....	.....	7	6	.....	1
Lithuanian	....	3	1	....	....	....	....	....	....	....	....	....	22	38	17	14	42	35	9	10
Magyar	1	10	7	10	....	1	....	....	....	....	....	....	46	168	81	75	170	337	200	174
Maltese	....	....	....	....	....	....	....	....	....	....	....	....	3	4	.....	.....	7	1	.....	.....
Moravian	....	....	....	....	....	....	....	....	....	....	....	....	.....	.....	.....	.....	.....	2	1	.....
Negro	1	4	....	....	....	2	....	....	....	....	....	....	2	39	3	6	5	32	.....	2
Persian	....	....	....	....	....	....	....	....	....	....	....	....	.....	1	.....	.....	.....	.....	.....	.....
Polish	2	8	3	2	1	....	....	....	....	....	....	....	105	126	39	31	229	320	122	129
Portuguese	....	....	....	....	....	....	....	....	....	....	....	....	2	4	.....	1	.....	2	.....	1
Roumanian	....	....	....	....	1	....	....	....	....	....	....	....	5	12	5	5	9	26	7	5
Russian	....	2	....	....	1	1	....	4	....	....	....	....	15	20	5	5	24	35	11	8
Ruthenian	8	11	3	4	....	....	....	....	....	....	....	....	83	116	41	39	263	304	100	101
Scandinavian—																				
Danish	19	10	14	13	157	43	38	24	14	9	5	5	346	170	18	21	185	103	45	37
Icelandic	....	....	....	....	....	....	....	....	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....
Norwegian	3	1	....	....	10	4	1	1	3	1	....	....	82	48	8	3	76	49	16	13
Swedish	9	1	....	....	46	11	2	....	....	....	....	....	224	54	8	6	394	158	43	27
Serbian	....	....	....	....	....	....	....	....	....	....	....	....	1	2	2	2	52	22	11	4
Slovak	2	7	3	5	....	....	....	....	....	....	....	....	44	112	49	46	132	169	73	87
Spanish	....	....	....	....	....	....	....	....	....	....	....	....	4	2	2	4	3	.....	.....	.....
Spanish American	....	....	....	....	....	....	....	....	....	....	....	....	1	.....	.....	.....	.....	.....	.....	1
Swiss	1	....	....	....	....	....	....	....	....	1	....	....	135	42	10	6	60	30	7	5
Syrian	4	4	4	1	....	....	....	....	....	....	....	....	3	8	5	4	12	11	4	4
Turkish	....	....	....	....	....	....	....	....	....	....	....	....	.....	.....	.....	.....	.....	2	.....	.....
Totals	634	466	294	241	517	321	452	298	41	18	10	10	5,710	4,717	2,405	1,242	13,991	11,977	5,318	3,906

18 Years and Over, and Under 18 Years, by Province of Destination, for the 1928-29

Manitoba				Saskatchewan				Alberta				British Columbia				Yukon Terr.				N.W.T.				Not Given			
18 years and over		Under 18 years		18 years and over		Under 18 years		18 years and over		Under 18 years		18 years and over		Under 18 years		18 years and over		Under 18 years		18 years and over		Under 18 years		18 years and over		Under 18 years	
M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M	F	M	F	M	F	M	F	M	F	M	F
9	4	.....	1	1	.....	.....	.....	2	1	.....	.....	.....	.....	.....	.....	..	..	..	..	..	..	..	..	..	..	..	..
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	..	..	..	..	..	..	..	..	..	..	..	..
.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	1	.....	.....	1	.....	..	..	..	..	..	..	..	..	..	..	..	..
227	71	17	21	25	16	9	5	23	24	11	11	5	5	3	1	..	..	..	..	..	..	..	..	..	..	..	..
2	1	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	..	..	..	..	..	..	..	..	..	..	..	..
6,926	518	509	212	962	500	375	232	1,048	642	366	277	777	732	283	268	..	..	..	..	..	..	..	..	..	..	..	..
997	148	80	51	264	156	69	58	337	192	95	66	128	103	49	46	..	..	..	..	..	..	..	..	..	..	..	..
2,996	264	191	106	394	250	113	90	492	288	161	138	322	349	119	146	..	..	..	1	..	1	..	..	..	..	..	..
1,178	51	56	35	116	29	39	29	173	68	59	45	53	32	33	26	1	..	..	..	..	..	..	..	..	..	..	..
.....	.....	.....	.....	2	.....	.....	.....	1	1	.....	.....	.....	.....	.....	.....	..	..	..	..	..	..	..	..	..	..	..	..
618	4	5	3	39	7	5	2	60	8	3	2	4	17	5	4	..	..	..	..	..	..	..	..	..	..	..	..
510	32	13	14	29	13	10	8	15	14	6	9	1	1	3	....	..	..	..	..	..	..	..	..	..	..	..	..
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	..	..	..	..	..	..	..	..	..	..	..	..
279	74	81	72	84	90	77	84	74	51	42	33	16	15	12	10	..	..	..	..	..	..	..	..	..	..	..	..
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	3	24	22	1	..	..	..	..	..	..	..	..	..	..	..	..
34	23	.....	1	1	2	.....	.....	6	8	4	1	.....	3	.....	.....	..	..	..	..	..	..	..	..	..	..	..	..
43	18	3	.....	18	12	3	6	26	18	3	4	185	88	17	14	..	..	..	..	..	..	..	..	..	..	..	..
34	8	1	7	32	26	5	7	13	6	4	3	5	6	1	....	..	..	..	..	..	..	..	..	..	..	..	..
5,167	1,669	728	706	616	581	309	263	388	331	177	164	49	43	23	10	..	..	..	..	..	..	..	..	..	..	..	..
9	2	.....	.....	18	1	1	1	2	3	3	.....	6	12	1	....	..	..	..	..	..	..	..	..	..	..	..	..
153	224	60	57	47	72	35	20	29	42	19	13	15	21	10	5	..	..	..	..	..	..	..	..	..	..	1	..
9	11	4	5	3	2	.....	.....	9	8	6	6	14	27	23	9	..	..	..	..	..	..	..	..	..	..	..	..
2	1	.....	.....	.....	1	.....	1	4	5	2	.....	115	207	63	43	..	..	..	1	..	..	..	..	..	..	..	..
2,196	52	2	5	26	16	11	7	80	22	9	13	26	41	20	15	..	..	..	..	..	..	..	..	..	..	..	..
29	14	.....	3	.....	3	.....	.....	3	2	2	1	.....	.....	.....	1	..	..	..	..	..	..	..	..	..	..	..	..
1,075	101	9	12	71	48	7	6	40	28	8	4	2	4	....	2	..	..	..	..	..	..	..	..	..	..	..	..
3,328	144	48	41	439	244	103	127	191	134	76	74	4	9	....	....	..	..	..	..	..	..	..	..	..	..	..	..
2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	..	..	..	..	..	..	..	..	..	..	..	..
1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	..	..	..	..	..	..	..	..	..	..	..	..
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	..	..	..	..	..	..	..	..	..	..	..	..
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	..	..	..	..	..	..	..	..	..	..	..	..
4,550	649	259	201	413	237	87	74	286	209	73	82	11	10	7	4	..	..	..	..	..	..	..	..	..	..	..	..
2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	..	..	..	..	..	..	..	..	..	..	..	..
153	6	1	2	9	15	7	3	4	4	1	1	1	1	1	....	..	..	..	..	..	..	..	..	..	..	..	..
451	32	19	18	53	55	26	17	39	20	12	10	6	14	4	1	..	..	..	..	..	..	..	..	..	..	..	..
9,333	1,210	410	326	777	514	156	140	763	523	135	164	12	19	7	9	..	..	..	..	..	..	..	..	..	..	..	..
914	142	39	32	145	75	45	27	248	131	75	64	59	25	5	9	..	..	..	..	..	..	..	..	..	..	..	..
7	10	3	1	1	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	..	..	..	..	..	..	..	..	..	..	..	..
410	85	34	22	353	118	46	42	307	155	73	66	223	93	41	47	..	..	..	..	..	..	..	..	..	..	..	..
949	78	44	31	150	55	22	19	205	65	54	40	399	120	47	36	..	..	..	..	..	..	..	..	..	..	..	..
217	26	7	4	7	9	5	5	11	.....	.....	.....	1	1	....	1	..	..	..	..	..	..	..	..	..	..	..	..
2,912	137	21	21	120	54	31	14	111	65	25	30	7	12	7	7	..	..	..	..	..	..	..	..	..	..	..	..
1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	..	..	..	..	..	..	..	..	..	..	..	..
.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	..	..	..	..	..	..	..	..	..	..	..	..
95	9	3	2	13	8	1	.....	14	13	5	2	16	10	1	1	..	..	..	..	..	..	..	..	..	..	..	..
1	.....	.....	.....	1	1	.....	2	2	3	1	.....	.....	.....	.....	.....	..	..	..	..	..	..	..	..	..	..	..	..
.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	..	..	..	..	..	..	..	..	..	..	..	..
45,819	5,819	2,647	2,014	5,230	3,212	1,597	1,289	5,007	3,084	1,511	1,324	2,466	2,046	808	716	1	..	1	1	..	1	..	..	1	..	..	..

REPORT OF THE CHIEF CONTROLLER OF CHINESE IMMIGRATION, A. L. JOLLIFFE

The head tax of $50 imposed upon Chinese in 1885, which was increased to $100 on January 1, 1901, and to $500 on January 1, 1904, was abolished under the provisions of the Chinese Immigration Act, 1923. Under the provisions of the present Act the entry to Canada of persons of Chinese origin, or descent, is confined to members of the following classes:—

(a) Members of the diplomatic corps, or other government representatives, their suites and their servants, and consuls and consular agents;

(b) Children born in Canada of parents of Chinese race or descent, who have left Canada for educational or other purposes, on substantiating their identity to the satisfaction of the controller at the port or place where they seek to enter on their return;

(c) (1) Merchants as defined by such regulations as the minister may prescribe; (2) Students coming to Canada for the purpose of attendance, and while in actual attendance, at any Canadian university or college authorized by statute or charter to confer degrees.

During the fiscal year 1928-29 one Chinese immigrant, a merchant, was admitted to Canada. Three students coming to attend Canadian universities, who will return to China when their studies have been completed, were admitted as non-immigrants. Six Chinese were deported during this period under various provisions of the Act.

Permits were issued under section 9 authorizing the temporary admission, for periods up to one year, of 61 Chinese, consisting mainly of actors and actresses under contract to appear in the different Chinese theatres, amahs, and servants of tourists, missionaries, students and teachers. Of this number, 26 have left Canada within the year. In the case of actors, amahs, servants and teachers, cash or guarantee bonds are required by the department, guaranteeing that they will engage in no other wage earning occupation and that they will leave Canada within the period of their permit.

Five thousand four hundred and eighty Chinese registered out during the present year, as provided for in sections 23 and 25 in the case of Chinese leaving Canada with the declared intention of returning. This registration, for which a $2 fee is charged, entitles the registrant to re-entry within two years. The number of Chinese registered out who have allowed their registrations to lapse, thereby forfeiting the right of readmission, is increasing.

During the fiscal year under review administrative fines were collected in three cases under section 19, five cases under section 21, and in two cases under section 31 of the Chinese Immigration Act. During this period the tax provided in section 27 of the Act was paid by thirteen Chinese and bonds of $2,000 were also estreated.

For the purpose of comparison the following table relating to Chinese Immigration is given:—

—	Exemptions	Paying tax	Percentage of total arrivals admitted exempt	Registered for leave	Total revenue
					$
1912-13	367	7,078	4·93	3,742	3,549,242
1913-14	238	5,274	4·32	4,143	2,644,593
1914-15	103	1,155	8·19	4,373	588,124
1915-16	68	20	77·27	4,064	19,389
1916-17	121	272	30·79	3,312	140,487
1917-18	119	650	15·47	2,907	336,757
1918-19	267	4,066	6·16	3,244	2,609,669
1919-20	181	363	33·27	5,529	538,479
1920-21	1,550	885	63·56	6,807	474,332
1921-22	287	1,459	16·44	7,532	743,032
1922-23	59	652	8·30	6,682	434,557
1923-24	49	625	7·27	5,661	334,039
1924-25	.....	.....	.....	5,992	308,659
1925-26	.....	.....	.....	3,947	25,969
1926-27	.....	.....	.....	5,987	14,844
1927-28	1	2	33·33	5,087	25,679
1928-29	1	.....	100·00	5,480	30,795
Totals	3,411	22,501	13·16	84,489	12,818,646

REPORT OF COMMISSIONER OF COLONIZATION, W. R. LITTLE

British Immigration

EMPIRE SETTLEMENT

Assisted Passage Agreements

The Assisted Passage Agreement of January 3, 1927, a summary of which appeared in the report of the last fiscal year, expired on December 31, 1928, and was replaced on the same date by an agreement which became effective on January 1, 1929.

An agreement was also made on September 20, 1928, to extend certain assisted passage privileges to the families of migrants from Great Britain and Northern Ireland who were in Canada on June 6, 1928, and who had so far established themselves as to have a reasonable prospect of being able to support their families in this country.

Under the principal Assisted Passage Agreement which became effective on January 1, 1929, migrants from Great Britain and Northern Ireland receive reduced passage rates or free passage:—

(a) Agricultural Families and Houseworkers

Members of agricultural families over 19 years of age and houseworkers over 17 years of age receive the following rates:—

Quebec, Halifax or Saint John	£2 0
Montreal	£3 0
Toronto	£3 10
Winnipeg	£4 10
Regina, Moose Jaw, Saskatoon	£5 0
Calgary or Edmonton	£5 10
Vancouver	£8 0

Members of agricultural families who have not reached their 19th birthday receive free transportation provided they are coming to agricultural work.

(b) Re-union of Families

Wives and children of migrants from Great Britain or Northern Ireland who arrived in Canada prior to the 6th day of June, 1928, and who have so far established themselves as to have a reasonable prospect of being able to support their families in Canada receive assisted passage privileges. Under the Family Re-union Scheme a wife receives a £3 ocean rate and children under 17 receive free transportation.

(c) Free Passage Grant for Juvenile Immigrants

(i) Boys between 14 and 19 years of age receive free transportation provided they are coming to Canada under the auspices of the Dominion Government, a provincial Government or an approved Voluntary Society to earn their livelihood on the land.

(ii) Girls between 14 and 17 years of age receive free transportation provided they are coming to Canada under the auspices of the Dominion Government or of an approved Voluntary Society for house work.

Nominations

(a) Who May Nominate

Any British subject resident in Canada who wishes to employ a household worker or an agricultural family may nominate any British subject in Great Britain or Northern Ireland.

(b) Persons Eligible for Nomination

Agricultural families coming to Canada to earn their livelihood as farm workers or under an approved Land Settlement Scheme.

Houseworkers who have reached their seventeenth birthday prior to sailing and are coming to Canada to engage in house work.

There are three forms of nomination, viz.:—

(a) Direct Nomination

This means that any British subject in Canada may nominate by name any British subject resident in the United Kingdom or Northern Ireland.

(b) Descriptive Nomination

By this method any British subject in Canada may nominate by description, *i.e.*, by giving the qualifications and description of the help required, wages and period of employment.

(c) Bulk Nomination

This means that agricultural families and houseworkers are selected by oversea officials of the Department of Immigration and brought forward for placement. Agricultural families are placed by the organization under whose auspices they are brought forward and houseworkers are placed through Canadian Women's Hostels.

EMPIRE SETTLEMENT, 1928-29

Summary of Nominations

Total Number of Cases Dealt With from April 1, 1928 to March 31, 1929			11,170
Bulk nomination			7,893
Single Men			7,161
Applications cancelled prior to sailing		710 or 9·91 per cent	
Total arrivals		6,451 or 90·09 "	
Disposition of arrivals—			
Placements reported	5,610 or 86·97 per cent		
Reported lost	584 or 9·05 "		
No report received	257 or 3·98 "		
Families			732
Applications cancelled prior to sailing		70 or 9·56 per cent	
Total arrivals		662 or 90·44 "	
Disposition of arrivals—			
Placements reported	434 or 65·56 per cent		
Reported lost	28 or 4·23 "		
No report received	200 or 30·21 "		
Direct nomination			2,581
Cancelled and rejected in Canada		624 or 24·18 per cent	
Referred Overseas		1,957 or 75·82 "	
Disposition of cases referred overseas—			
Sailings advised	1,099 or 56·16 per cent		
Cancelled and rejected in England	593 or 30·30 "		
Outstanding	265 or 13·54 "		
Family reunion agreement			696
Cancelled and rejected in Canada		176 or 25·29 per cent	
Referred overseas		520 or 74·71 "	
Disposition of cases referred overseas—			
Cancelled and rejected in England	21 or 4·04 per cent		
Sailings advised	209 or 40·19 "		
Outstanding	290 or 55·77 "		

Agricultural Trainees

Early in 1928 arrangements were made to receive and place approximately 1,200 British trainees. Of this number 1,049 arrived after April 1, 1928.

Early in January, 1929, arrangements were made to place 6,000 British trainees. It was subsequently found, however, that this number of long-course trainees would not be available in time for spring placement. It was then decided to accept one short for every three long-course trainees. Under this arrangement there arrived prior to March 31, 1929, 221 long-course and 280 short-course trainees, or a total of 501.

Arrangements were made for two main central distributing points, viz., Toronto and Winnipeg.

In the province of Ontario trainees were placed under the supervision of the Director of Colonization for the provincial Department of Agriculture. In Western Canada placement was under the direction of the Division Commissioner of Immigration through the District Land Superintendents of the Land Settlement Branch and in co-operation with provincial Governments and municipalities. A comparatively small number of trainees were also placed by the provincial Department of Agriculture, Prince Edward Island, and in the province of Quebec by the Eastern Townships Immigration Society.

Training centres have been established overseas under the auspices of the British Government. Selections both prior to, and after, training are made by officials of the Department of Immigration and Colonization.

The following is a summary of the long and short-course training:—

TRAINING COURSES FOR CANADA, 1929

(1) Twelve Weeks—	
Tree felling and land clearing	Use of Canadian axe, crosscut saw, wedges, etc., also mattock and spade.
"A"—Fencing and rough carpentry	Erection of wire fencing, gate hanging; construction of rough shelters.
"B"—Dairy	Milking; feeding and care of dairy stock; separating and buttermaking.
"C"—Handling of horses and ploughing, etc.	Harnessing and driving two-horse teams, Canadian harness and wagons are used throughout; stable work—feeding, watering and grooming. Walking and riding ploughs, including Great West ploughs.
General Farming	Preparation of land for various crops. Drilling, harrowing and all general farm operations.
(2) Four Weeks—	
"A"—Manual labour	Including:— (1) Tree felling, clearing and grubbing (Canadian axes, mattocks, etc.). (2) Road-making and draining (pick-axe and spade). (3) Erection of wire-fencing and rough carpentry on green timber.
"B"—Handling of horses	Including:— Harnessing and driving of two-horse teams—Canadian wagons and harness.

Houseworker Trainees

Arrangements have been made with the British Government for the training overseas of houseworkers for Canada. Provincial Governments were invited to participate in this work and the Department of Immigration received orders from the provinces for the following trained houseworkers:—

Ontario	300
Alberta	200
Saskatchewan	150
Manitoba	50
Total	700

Canada's cash contribution towards training is $20 for each houseworker, *i.e.*, $15 by the Dominion Government and $5 by a provincial Government.

Houseworkers for Canada are being trained at the following centres:—

1. *Scottish Hostel, Millersneuk, Lenzie, Glasgow.*—This Hostel has accommodation for a total of 36 trainees, or 175 per annum.

2. *The Training Hostel, Newcastle-on-Tyne.*—This Hostel has accommodation for 25 trainees, or 140 per annum.

3. *Church Army Training Hostel, Cardiff.*—This Hostel has accommodation for 15 girls, or 75 per annum.

4. *St. Mary's Training Hostel, Portobello Road, London.*—This Hostel has accommodation for 36 girls, or 130 per annum.

Three Thousand Family Scheme

The principal agreement was made on the 20th day of August, 1924, and expired on the 30th day of June, 1927. Prior to the expiration of this agreement 2,669 families were brought to Canada and established on farms. By a supplementary agreement dated the 9th of December, 1927, the principal agreement was extended until the 30th of June, 1928, in order to complete the total number of 3,000 families. A further supplementary agreement was made on the 19th of November, 1928, which will expire on the 30th of June, 1929, to provide for an

additional number of families to finally complete the scheme. Up to the 31st March, 1929, 3,030 families have arrived. Of this number 72 families did not occupy farms and 501 families withdrew from the scheme after occupying farms. Of the 573 who have left the scheme, 164 are engaged in agriculture in Canada, 241 are in other employment, 104 have returned to the United Kingdom, and the whereabouts of 64 are unknown.

New Brunswick Land Settlement Scheme

This Scheme, which provides for the settlement of 500 British families on farms in the province of New Brunswick within a period of six years, was explained in the report for the last fiscal year. Up to the end of the fiscal year 99 families have been settled under this Scheme.

Provincial Reception and Distributing Farms for British Boys

A general outline of the Tripartite Agreement for provincial reception and distributing farms was given in the report for the last fiscal year. Reception and distributing centres are now in operation in the following provinces:—

Nova Scotia.—The Agricultural College at Truro.

New Brunswick.—The Cossar Farm at Lower Gagetown.

Ontario.—Vimy Ridge Farm near Guelph.

Manitoba.—Manitoba Agricultural College.

Saskatchewan.—Agricultural College at Saskatoon.

British Columbia.—The provincial Government has agreed to participate and expect to have a farm ready for the Spring of 1930.

Quebec.—The British Immigration and Colonization Association have a reception and distributing farm on the island of Montreal. This association places boys principally in eastern Ontario and in the Eastern Townships of Quebec.

Boys Land Settlement Scheme

This Scheme was explained in the report for the last fiscal year. The provincial Governments which have decided to participate are: Nova Scotia, New Brunswick, Ontario, Manitoba, and British Columbia.

Cottages

The 54 cottages which were erected under the agreement of the 13th May, 1924, are still being used for the temporary accommodation of British families.

The Chairman of the Oversea Settlement Committee who visited Canada during the summer of 1928 made proposals to the Department of Immigration, to provincial Governments and to other organizations to erect cottages for the use of British families while undergoing a course of training preparatory to settling on farms. The Department of Immigration agreed to participate with provincial Governments in the erection of cottages for this purpose, the cost of the cottages to be not more than $1,000 each, allocated as follows:—

British Government	$ 500
Provincial Government	250
Immigration Department	250
Total	$1,000

The Ontario Government decided not to proceed with the Scheme this year. The Alberta Government also had the matter under consideration but no action was taken.

The United States Field

The offices at Harrisburg and Syracuse were closed and an office was opened in Buffalo. The agent at Syracuse, who has been transferred to Buffalo, will work the area formerly covered by the agents at Syracuse and Harrisburg.

Agricultural products were displayed at 70 exhibitions and a total of 1,384 good prospects were established.

SUMMARY of the Result of Immigration Work in Each Canadian Government Immigration Bureau in the United States for the Fiscal Year ended March 31, 1929.

UNITED STATES—REPORT OF IMMIGRATION BUSINESS FOR THE FISCAL YEAR 1928-29

Agency	Number of inquiries	Settlers reported by:		Number carloads	Value of carloads and effects	Good prospects outstanding
		Agent	Stat. Br.			
					$	
Fargo	4,776	2,332-3,265	2,506	150	5,141,010	2,009
Spokane	3,125	1,158-2,183	3,090	20	1,704,775	604
Kansas City	3,393	1,033-1,632	924	9	1,209,705	360
Minneapolis	2,292	723-1,332	1,189	80	755,215	469
Detroit	2,083	705-1,074	5,077	4	1,570,095	300
Great Falls	1,691	627-1,016	1,137	13	917,605	463
Omaha	1,611	494- 751	703	43	1,318,175	251
Woonsocket	686	277- 796	897	59	157,000	276
San Francisco	1,982	275- 622	1,698	1	726,392	19
Syracuse	1,056	264- 490	3,569	2	410,042	83
Boston	589	251- 757	1,759	.....	295,950	58
Chicago	1,448	211- 384	1,436	13	477,200	207
Harrisburg	2,268	140- 236	2,291	5	129,600	413
Manchester	649	139- 353	1,740	2	182,172	91
Indianapolis	1,138	105- 195	878	.....	581,630	201
Columbus	1,297	93- 176	1,396	1	124,865	108
Totals, 1928-29	30,084	8,827-15,262	30,290	402	15,701,431	5,912
Totals, 1927-28	27,533	7,496-12,286	25,007	364	14,971,670	5,127
Totals, 1926-27	18,540	-10,590	21,025	337	14,002,375	5,165

Our agents report that in addition to the large number of inquiries which are received from those interested in land settlement, there is an ever increasing demand for information by tourists and sportsmen. This demand is met by literature and road maps which are published by provincial Governments.

REPORT OF THE DIRECTOR OF EMIGRATION FOR CANADA IN EUROPE, J. BRUCE WALKER

I beg to submit herewith the Annual Report of the Director of Emigration for Canada in Europe for the year ended March 31, 1929.

I am submitting along with this, divisional reports dealing with various aspects of the work, and I desire to offer only a few brief comments on general conditions with respect to emigration from the British Isles and from the continent of Europe.

The Canadian medical examination, which was adopted at the beginning of the last fiscal year, has been carefully tested in all its various phases, and a review of the work enables me to say that the Canadian medical examination overseas is to-day comprehensive, effective, and working with exceptional smoothness. The pessimistic fears of congestion and difficulty have been proved to be, in the main, very unimportant, and while there have been, and doubtless will be occasional obstacles, I am convinced that the Canadian Government medical examination overseas, after a number of vicissitudes and difficulties, may be said to be an unquestioned success, and that its continuance is assured.

Perhaps the most outstanding feature, or, at least, the feature most subject to criticism and comment in last year's work, was the movement known as the British Harvesters Movement. It was a success only in the most limited sense, and in the opinion of those nearest to the situation on this side, the results obtained under the circumstances could hardly have been otherwise than they turned out. The movement had its origin in a hope of the British Ministry of Labour in England, that surplus unemployed workmen in these Islands might to some extent be usefully employed in garnering the bounteous harvest reported, particularly in the Canadian West. Unfortunately, the haste of the movement, and the pressure of providing eight or ten thousand men with transportation across the Atlantic in fourteen or eighteen days, compelled the suspension of the requirements of certificates of character, usually demanded from persons receiving State aid in their migration. It was impossible to do anything but insist upon a medical examination of applicants.

The result was a movement of those who while generally physically fit, were not of the type to take a serious view of the value of work in the scheme of life; but, were rather attracted by a free trip across the ocean. The fact that nearly 75 per cent of the 8,449 men who were shipped as harvesters from this country returned to England, reflected, I think, the hasty and immature manner in which the men were recruited. The impression that was allowed to prevail in official circles, that the applicants would be cared for and returned to England, if it was their wish, after more or less work in Canada, created a feeling amongst a great many of the harvesters that the trip was worth taking anyway, for it cost them nothing and they were sure of a return voyage.

It is still too early to discover the effect on migration of the introduction of what is known as the "£10 rate," a rate arranged between the steamship companies engaged in the North Atlantic passenger business to Canada, and the British Government authorities, which came into operation only January 1st, 1929. Heretofore, the only existing low passenger rate (given under the Empire Settlement Passage Agreement) for Atlantic travel required, as an indispensable condition, that they must be destined, in the case of men, to farm employment; and, in the case of women, to domestic work. So far as men are concerned, the Empire Settlement rate for prospective single farm labourers was abolished, as it became evident that a considerable proportion of those leaving these Islands under the promise of engaging in farm employment in Canada, did not seek such employment but, rather, gravitated towards the cities, thus nullifying entirely the purpose of the cheap rate to secure farm help.

The existing £10 rate is applicable to all immigrants without respect to employment. It is designed to encourage a free general movement of all desirable persons, qualifying medically and morally, who are prepared to pay their own way on the basis of £10 for the ocean transportation, plus an additional sum, determined upon by the extent of the inland journey. So far the inquiries received by the shipping companies up to March 31, indicate that a steady, and perhaps an increasing flow of suitable migrants at this rate will be maintained.

The transportation of about two thousand young men, who have been undergoing training for a shorter or longer duration, as the case may be, in British Government training camps, is something of an experiment which may be watched with increasing interest. These two thousand young men have had various degrees of agricultural training in training camps here. They are of two classes, namely, those who have had the long course of about twelve weeks, in which they had some acquaintance with farm implements, feeding stock, milking, and with dairy work. The balance of the young men have had what is known as the short course of four to six weeks—wood-chopping, forestry work, fence building, ditch digging, and other outside employment, calculated to harden their muscles, and give them at least some desire for an outside life. It is too early to say how far the training scheme has been profitable. In the previous year the majority of the trainees did very well.

The whole staff in Europe, both on the Continent and in the British Isles, has worked cordially, and in most cases with unabated enthusiasm for Canada.

Emigration Work

The following is a summary covering the work of the Emigration Agents in the British Isles.

LECTURES

The lecture season opened in the month of October and extended to the middle of December, although a few special lectures were delivered later in the fiscal year as opportunity offered or requests were made. A total of 341 lectures were delivered. These include lectures at Training Centres, Military Headquarters and Women's Guilds. The lectures to men serving with the colours were directed especially to those about to return to civil life, at the expiration of their term of enlistment. The results of these lectures are shown in the schedule given below:—

District	Total number lectures	Attendance at lectures	Literature distributed	Prospects		
				Families	Single men	House workers
Bangor	36	11,950	8,950	18	59	5
Belfast	41	8,930	12,535	17	68	9
Birmingham	53	7,576	15,673	41	84	5
Bristol	35	2,931	6,393	21	12	1
Glasgow	38	3,599	6,837	27	44	6
Inverness	30	1,707	3,528	6	20	2
Liverpool	44	4,149	5,395	40	29	2
London	31	4,845	7,500	7	6	4
York	33	4,378	9,085	38	32	3
Totals	341	50,065	75,896	215	354	37

The expenditure on lectures was £2,451.19.9½.

LANTERN SLIDES

During the year the sets of lantern slides were used on 1,267 occasions, including 828 times from the London office. The sets available for loan to lecturers embrace farming in all its various phases, also lumbering, beauty spots and places of interest; industries, early history of Canada, Canada from the air and Canadian National parks.

FILMS

A steady demand for good Canadian films has continued. Much good publicity could be secured if a more generous supply of Canadian films were available.

PHOTOGRAPHS

The stock of photographs was generously replenished during the year with more up-to-date prints, but the supply is still not in excess of the demands made on it for newspaper, magazine and book illustration, and for reproduction as slides and for lecture purposes. There is also a good demand for photographs for the use of artists dealing with Canadian subjects.

EXHIBITIONS

During the 1928 show season the department had exhibition displays at 98 places. The official figures show a gross attendance of 1,190,121. The Can-

adian Government stands were visited by 342,055 persons, and 208,918 pieces of literature were distributed to those who showed themselves interested. Below is a summary of statistics of Agricultural Shows attended:—

District	Total number of shows	Total attendance at shows	Total attendance at stands	Literature distributed	Prospects		
					Families	Single men	House-workers
Bangor	14	66,900	22,000	20,300	34	74	4
Belfast	7	73,962	19,000	20,300	2	1	3
Birmingham	8	89,911	50,250	15,800	14	11	.....
Bristol	14	91,965	15,990	4,718	10	18	1
Glasgow	10	46,500	5,400	4,025	13	17	1
Inverness	1	75,501	8,900	6,000	5	4	.....
Liverpool	19	388,929	144,430	72,350	72	103	4
London	7	171,953	59,300	42,700	4	13	.....
York	18	184,500	16,785	22,725	19	43	.....
Totals	98	1,190,121	342,055	208,918	173	284	13

The "prospects" comprised only names and addresses given by bona fide applicants desirous of proceeding to Canada, and not merely the casually interested spectator. The figures, however, afford no accurate estimate of those interested in the displays, because, as I have pointed out in previous reports, there is a very natural indisposition on the part of farm workers and country people generally to come forward and discuss their affairs in public with our representatives. The reason is obvious. Word would quickly spread throughout their own neighbourhood, and the farmer who employed them would, it is often felt, promptly replace them with those on whose permanency more reliance could be placed. Moreover, information is frequently asked for by inquirers who decline to give their names and addresses. These, therefore, are not included as "prospects," as it is impossible to follow them up directly.

During the year a change was made in connection with the erection and decoration of the show stands, the Exhibition Commissioner taking over the duty, so far as it was possible for him to do so, while getting his organization into full operation.

Trade Exhibitions

From last October, in co-operation with the Exhibition Commissioner, the department was represented at thirteen commercial and Empire exhibitions. The total attendance at these shows was 1,134,264, and while they were not entirely or ostensibly devoted to the work of this department, they are bound to have exercised a very considerable effect thereon. The amount of literature distributed to visitors was 71,681 pieces.

The sum expended on exhibitions and exhibits was £2,400.5.8.

Motor Exhibition Vans

Our two motor exhibition waggons having become obsolete were replaced by a more serviceable vehicle. The new exhibition motor van was specially designed under the supervision of the Exhibition Commissioner, and was put on the road towards the end of the year. Owing to the severity of the winter, however, its activities were considerably restricted.

The total expenditure on account of exhibition motor wagons was as under:—

Car No. 1	£	36	0 0
Car No. 2	£	21	14 7
Car No. 3	£	633	19 1
Total	£	691	13 8

Advertising

In the middle of January advertisements were inserted in 448 papers and journals in Great Britain and Ireland. Attention was chiefly concentrated on the various schemes for the settlement of families, men, youths and boys on the land, and women in domestic service.

In addition to the general advertisements above referred to, a considerable number of local advertisements were inserted by the agents of the department in the provinces, as occasion arose, for the purpose of advertising their lectures, meetings or interviews with prospects, etc.

A larger space than usual was taken in the more important National weekly papers, and results have proved that the expenditure was justified. The Sunday paper has now become the paper of the masses in town and country alike.

The total sum expended in advertising during the fiscal year was £10,243.0.3.

Canadian Official News Bureau

The Canadian Official News Bureau continued to actively co-operate with the department, and during the year secured all over the British Isles widespread publicity in the columns of the British newspaper press, from the *Times* to the small local country weeklies.

The important feature of the year's work was the amount of publicity secured in the large dailies, the editors of which have shown themselves increasingly favourable to the work of the department, possibly on account of the amount of unemployment which prevails in this country, and for which emigration is regarded as one of the remedies.

Literature

For a part of the year the supplies of literature were unequal to the demand. The total number of pieces distributed was 763,954. Of this total about 80,000 pieces were used by the Exhibition Commissioner at Trade and Commerce fixtures, such as the British Industries Fair, at London and Birmingham; and the Ideal Homes Exhibition in London.

The Atlas continues to be the most popular of the series, both for the British Isles and for the Continent.

A useful but recent addition to the series of the department's pamphlets is the booklet "Boy Settlement in Canada." This has filled a long felt want, and it has been brought particularly to the notice of schoolmasters.

Another very successful publication has been "On the Doorstep of Prosperity in Western Canada," the supply of which is now practically exhausted.

The following statement shows the number of pamphlets received and distributed during the year:—

Pamphlets Received		Pamphlets Distributed		
On hand, Mar. 31, 1928	662,318	By agents	462,143	
From Ottawa	549,748	By London	218,965	
Other sources	25,772	By shows (trade)	71,681	
		By wagon	11,165	
				763,954
		On hand, Mar. 31, 1929		473,884
Total	1,237,838	Total		1,237,838

The total amount expended by the Dominion Government and the British Government on account of assisted passages is as follows:—

(a) Nominated Passages	£	201,209	0	3			
(b) Family Settlement Scheme		40,096	17	9			
(c) Household Workers		64,212	3	6			
(d) Juveniles "A"		39,075	14	0			
" "B"		1,261	5	2			
" Provincial Schemes		1,358	1	8			
					£	347,213	2 4
In addition to which there has been expended for salaries, administration expenses, refunds, etc., the sum of						3,536	7 2
Making the total Empire Settlement expenditure during the Fiscal Year 1928-29					£	350,749	9 6

Continental Europe

Antwerp.—The records show that during the fiscal year 1928-29 a total of 9,966 emigrants were examined at the port of Antwerp, of whom 9,311 were passed and 655 rejected. The various nationalities presented comprised principally Hungarians, Czecho-Slovakians, Belgians, Poles, Yugo-Slavs, Roumanians, Lithuanians, Austrians, Swiss, together with numbers of various other nationalities. The records show that 58 families of various nationalities took with them capital aggregating $130,000.

Paris.—During the past fiscal year some 13,625 emigrants were presented for examination, of whom 12,586 were passed. These figures show an increase of over 2,000 as compared with the fiscal year 1927-28.

The records show that the number of French nationals to whom visé was granted amounted to 585, as against a total of 593 during the previous fiscal year, while 322 Swiss were granted visé, as against 457 during the previous year. The number of Italians shows a considerable decrease, due to the restrictions imposed by the Italian Government.

Rotterdam.—The records show that a total of 3,017 persons were examined at this port, as compared with 3,059 during the previous fiscal year. Office records show that 45 families took with them $129,100 capital.

Hamburg.—The records show that at the ports of Hamburg and Bremen some 11,561 visés were granted during the past fiscal year, as compared with 8,590 during the previous year.

A seasonal inspector has been established at Bremen, under the supervision of the permanent officer at Hamburg, for the purpose of conducting examinations at the former port, this being due to the fact that the number of sailings has increased considerably.

Families proceeding with capital aggregated 31, representing some 140 persons, who were in possession of $126,150. Those persons proceeding under the Lutheran Immigration Board numbered 756, which shows an increase of 84 over the previous year, while those proceeding under the auspices of the German Canadian Catholic Association totalled 727 persons, representing an increase of about 24 per cent over the previous year.

Danzig.—The records for this port show that the number of visés granted was 20,993, which covered 25,268 persons, as compared with 18,110 persons during the previous year. The records indicate that 23,908 of the total were Polish nationals, the balance being made up of nationals of various countries. Families proceeding in possession of capital amounted to 159, comprising 842 persons, and their capital $253,000.

Riga.—The movement through this port during the past fiscal year amounted to 2,775 persons, as compared with 2,219 during the previous year. The number of families proceeding with capital amounted to 15, who were in possession of $27,500.

Synopsis of Special Groups

Mennonites.—The number of Mennonites who went forward amounted to 441.

Lutheran Immigration Board.—The number of persons who proceeded under the auspices of this organization totalled 1,516, which is a slight decrease as compared with the previous year.

Association of German Canadian Catholics.—This association was responsible for the movement of 1,066 persons, as compared with 1,205 persons during the previous fiscal year.

German Baptists Board.—Some 448 persons proceeded to Canada under the auspices of this organization.

The following statement shows the amount of capital in the possession of persons to whom visé was granted at our various continental offices:—

Office	Amount of capital
	$
Antwerp	130,000
Paris	86,000
Rotterdam	129,100
Hamburg	126,150
Danzig	253,000
Riga	27,500
Total	751,750

Statement of Preliminary Civil Inspection showing passports viséd, rejections, appeals, and causes of rejections, etc.

Office	Visé granted	Visé refused	Appeals			Causes of rejection							Letters in	Letters out	Interviews
			Sustained	Dismissed	Pending	P.C. 182	P.C. 183	P.C. 185	Sec. 3, ss. b.	Sec. 3, ss. c.	Sec. 3, ss. j.	Sec. 3, ss. t.			
Antwerp	9,311	655	69	166	81	1	203	39	89	192	11	36	10,582	19,801	10,981
Paris	12,586	1,039	44	58	88	6	310	249	311	256	26	19	5,231	6,288	5,582
Rotterdam	3,017	307	38	70	35	1	75	14	33	71	....	1	3,830	4,773	4,810
Hamburg	11,561	1,008	194	233	165	.....	100	21	84	504	1	31	5,104	8,853	2,990
Danzig	25,268	1,489	554	567	805	.....	42	24	235	470	18	25	5,466	11,059	3,646
Riga	2,775	823	169	99	137	.....	55	99	60	302	13	4	4,549	5,197	1,135
Totals	64,518	5,321	1,068	1,193	1,311	8	785	446	812	1,795	69	116	34,762	55,971	29,144

Note.—Some aliens were rejected on account of more than one statutory cause, consequently the number of rejections will not correspond with the causes of rejections, *e.g.* one alien may have been rejected upon two grounds—P.C. 182 and P.C. 183.

REPORT OF THE DIRECTOR OF PUBLICITY, ROBERT J. C. STEAD

The year under review was one of considerable activity in the publicity work of the department. As in the past, the field toward which publicity activities were directed was almost exclusively the British Isles and the United States. Advertising campaigns were conducted in both countries; standard publicity publications of the department were revised and reprinted, and new publications compiled, and the amount of press publicity circulated by direct action from Ottawa exceeded all past records. While it is not suggested that the

flow of immigrants is necessarily proportionate to publicity activities, the two do bear a relationship, and it is noteworthy that the year now being reviewed showed the largest movement of immigrants to Canada which has taken place since the war.

Advertising

It has been the practice of the department for many years to make known the opportunities for agricultural settlement in Canada by advertisements in agricultural papers published in the British Isles and in the United States. In the British Isles papers not directly of the agricultural class are also used on account of their large circulation in rural areas and among classes from whom it is hoped to recruit suitable immigrants. The advertising in the British Isles is also directed in part toward obtaining women and girls for household work in Canada.

Advertising in the British Isles is placed mainly in the winter months, continuing until the end of April. It is to a large extent suspended through the summer months, as it has been learned that it is during the winter that most immigrants make up their minds concerning the move to Canada, and it is in the spring that this movement reaches its height. For seasonal reasons spring migration is regarded with most favour, and the advertising campaign is scheduled accordingly. The advertising is designed to present information concerning Canadian opportunities on the land both as owners and labourers, and opportunities for women in household service, but it is not practicable within reasonable costs, to present in any detail a picture of opportunities in Canada in the advertising columns of the newspapers and agricultural press. The main purpose is to catch the attention of persons who may be interested in migrating and to place them in personal contact with one of the agencies of this department. When an inquiry is received at an office of the department it is followed up with ample descriptive literature, with information by correspondence, and, so far as is practicable, by a personal interview with the inquirer. The general advertising of the department in the British Isles is placed through an advertising agency in London, supervised as to detail by the London office of the department and in a general way by headquarters in Ottawa. Inquiries arising from advertising in the British Isles go direct to the office of the department in that country, and are not tabulated in this report.

Advertising in the United States follows somewhat the same plan as in the British Isles, except that no appeal is made to the woman domestic, and the campaign is directed more particularly toward farmers of some means who are financially able to establish themselves in Western Canada. It is inserted in the leading national farm papers and in state farm papers in those states in which best results can be expected. It is also inserted in United States papers published in the Scandinavian and German languages, through which it reaches a large body of settlers, who, while they are in most cases conversant with English, still prefer to read papers published in their mother tongue. The advertising in the United States is placed through one of the leading Canadian advertising agencies under the immediate and personal supervision of the Publicity Branch in Ottawa.

As in the case of advertising in the British Isles, it is not suggested that the whole story of Canada can be told in high-priced space. The object is to draw the inquiry of any one who may be interested. The national advertising carries the address of the fifteen agencies of the department in the United States, and interested persons are invited to correspond with the nearest office. Local and state papers carry the address of the agency for that state. Each address shows a "key number" from which it is possible to know the paper which produced the inquiry. These sources of inquiry are carefully recorded, as are also ultimately the results of the inquiries, and these records, extended over a period

of years, give a very clear indication of the pulling power of the advertising generally and of each medium specifically. Papers which fail to give satisfactory results are dropped and others likely to be of service are substituted in their place.

Each United States agent deals by correspondence with the inquirers in his territory. If, as frequently happens, inquirers are received from outside his territory these are referred to the proper agency for attention. A very considerable number of inquiries are also received at headquarters in Ottawa, and, after being answered, are referred to the agents for the territories in which they originated. Inquirers are provided with suitable literature, and, in as far as is practicable, are personally interviewed by a representative of the department in their territory.

In addition to 28,316 inquiries received direct by the agencies of the Department in the United States, 1,791 inquiries from United States points were received in Ottawa. The total inquiries received from the United States during the year were 30,107, compared with 28,139 the previous year—an increase of 1,968.

Aside from inquiries originating in the United States a number from other countries reach the publicity office each year. In the year under review these totalled 402.

Booklets and Publications

As has been indicated in the foregoing section, the purpose of the advertising expenditure of the department is mainly to lead possible settlers to correspond with our agents in the British Isles and the United States. The next step is the supplying of more detailed information about Canada than is possible in paid advertising space. This is done by the use of booklets prepared by the Publicity Branch and supplied in ample quantities to the agencies of the department in the British Isles and the United States. The departmental booklets are designed to give general information about Canada, with more specific attention to the opportunities for settling on the land. These opportunities are presented, both by text and illustration, but care is also taken that all statements must be in strict accordance with fact, and that the prospect presented is not more attractive than has been attained by hundreds of settlers who have already located in Canada and may be attained by hundreds more in the years to come.

It is not possible to state exactly what booklets were compiled and produced in the fiscal year under review, as the work goes on continuously and one year's production overlaps the next. The summary hereunder, will, however, give a general outline of the publications issued and distributed by the branch during the fiscal year 1928-29.

One of the most widely circulated booklets of the department is its "Descriptive Atlas of Canada." This is an 84-page book prepared in the style of a school geography, with text, illustrations, and maps. It deals with the history, population, natural resources, and developments of the Dominion along the approved lines of a school text book. While it is supplied to general inquirers in response to their requests, its main distribution is for use as a school text book in the British Isles and in the United States. Although produced in large quantities the demand from these countries continually exceeds the supply. An edition of 106,106 copies was delivered in April, 1928, for distribution in the United States. The booklet was then revised and a further edition of 102,835 copies printed for distribution in Great Britain.

Our "Canada West" booklet is devoted to a description of the western provinces—Manitoba, Saskatchewan, Alberta and British Columbia—featuring particularly their agricultural resources and the opportunities they offer to settlers. The booklet is well illustrated and contains up-to-date maps in colours

of each of the provinces. It is issued in separate editions for use in the British Isles and the United States, as the information required in the two countries varies slightly. During the year the booklet was revised and a British edition of 200,855, and a United States edition of 304,000 copies, were printed.

The "Eastern Canada" booklet is a companion publication to "Canada West" and deals with the eastern provinces in a similar manner. It, too, is generously illustrated and carries maps in colour of each of the provinces. New editions of this booklet for distribution in the British Isles and in the United States were under way but were not delivered until after the close of the fiscal year.

The "Farm Opportunities in Canada" booklet is a 32-page folder pamphlet of cheaper production than "Canada West" or "Eastern Canada" containing general information about farm opportunities in the Dominion. It is not divided into provincial sections but into sections according to the class of farming, such as grain farming, stock farming, fruit farming, etc. This booklet is very widely used by the agents of the Department as the first follow-up in response to a general inquiry. During the year it was revised and an edition of 10,000 copies printed in the Danish language and 25,000 in the French language. A large edition for distribution in the United States had just been delivered before the beginning of the year and was sufficient to meet requirements in that country. The booklet was carefully revised and an edition of 200,000 placed in hand for distribution in the British Isles but these had not been delivered at the close of the fiscal year.

The Vest Pocket booklet issued by the department contains information concerning Canada presented in the convenient form of questions and answers. The booklet is of a size suitable for being carried in the pocket and is much favoured by the departmental agencies for distribution at fairs and for similar purposes. It is also used as a compact means of conveying information concerning settlement opportunities in Canada to persons reading other languages besides English and French. This booklet was issued during the year in the following quantities: British edition, 151,895; Norwegian, 10,573; Serbian (in Cyrillic), 10,655; Serbian (in German), 10,655; Czech, 10,660; Croatian, 10,630; Magyar, 10,600; Slovak, 10,600; German for Czecho-Slovakia, 10,600.

The "Houseworker in Canada" is a small booklet prepared for the information of women and girls in the British Isles who may contemplate engaging in housework in this country. It explains in brief form the duties which such an employee is required to do in a Canadian household, the general rate of wages, the cost of passage, location of women's hostels in Canada, etc. During the year 25,500 copies of this booklet were printed for distribution entirely in the British Isles.

During the year under review a new booklet "Boy Settlement in Canada" was compiled and produced for the first time. This booklet is designed to explain to British boys the plans and facilities under which they may come to Canada for farm work and may eventually be assisted by the Canadian, British and provincial Governments in the financing of farms of their own. The booklet is of 32 pages, generously illustrated from photographs showing actual Canadian scenes. The quantity printed in the first edition was 31,150.

In connection with an excursion arranged under the joint auspices of the department, the Canadian National Railways and the Canadian Pacific Railway Company for a visiting party of Danish and Norwegian editors to enable them to see something of the agricultural and other resources of Western Canada, a booklet was prepared descriptive of the scenes en route and containing much general information about the provinces traversed. As this was for very limited circulation upon a special occasion only 150 copies were printed.

The "Manual of Citizenship" is a 40-page booklet in convenient size containing a great amount of valuable information for the new settler. It is not

distributed for the purpose of attracting settlers to Canada but for the purpose of informing the settler after he has made his decision. It presents such information as hints for the voyage, homestead and immigration regulations, naturalization and voting, etc., along with an outline of Canada's system of education, government, transportation, etc. During the year 49,800 copies were produced.

"Information for Settlers" is a small pamphlet for distribution among persons in the United States who have practically decided upon coming to Canada to engage in farming. It contains information as to railway rates, customs, quarantine regulations, homestead regulations, etc. Ten thousand copies were issued during the year.

"Land Settlement Canada—Where to Go For Advice" is a booklet in which are listed the names of representatives of the Department of Immigration and Colonization in the various provinces of the Dominion, the agents and sub-agents of Dominion Lands, the Government employment offices, the provincial Government officials related to immigration and colonization work and provincial agricultural representatives. This booklet is placed in the hands of new settlers so that they may know to whom they may turn in the locality in which they settle for authoritative and disinterested advice. The quantity printed during the year was 20,000.

"British Farm Settlement in New Brunswick" is a new booklet compiled during the year describing the plan for settlement of British families as a result of an agreement entered into between the Government of Canada, the Government of New Brunswick and the British Government. It contains photographic reproductions illustrating the province of New Brunswick and also showing British settlers in their actual home surroundings in that province. The quantity issued was 10,150 for distribution entirely in the British Isles.

In addition to the above publications a weekly bulletin is issued entitled "Canada Week by Week," in which is recorded information concerning Canadian developments mainly along agricultural lines. The general circulation of this bulletin is among newspaper editors and news agencies outside of Canada, some of whom reproduce from it very extensively. During the year 52 issues were published representing a total of 100,550.

A summary of the publications and other publicity literature issued during the year follows:—

	Copies
Atlas of Canada—British	102,835
" " United States	106,106
Boy Settlement in Canada	31,150
British Farm Settlement	10,150
Canada West—British	200,855
" " United States	304,000
Farm Opportunities in Canada—	
" " " Danish	10,000
" " " French	25,000
Houseworker in Canada	25,000
Information for Settlers	10,000
Land Settlement Canada	20,000
Manual of Citizenship	49,800
Norwegian-Danish Booklet	150
Vest Pocket Booklet—	
" " " Serb (Cyrillic)	10,655
" " " Serb (German)	10,655
" " " British	151,895
" " " Norwegian	10,573
" " " Czech	10,660
" " " Croatian	10,630
" " " Magyar	10,600
" " " Slovak	10,600
" " " German	10,600
All publications	1,131,964

News and Feature Articles

An important branch of the publicity work of the department is that connected with the distribution of news, feature articles and photographs, mainly to newspapers outside Canada. For this purpose the Publicity Branch of the Department of Immigration and Colonization also functions as the Canadian Government Information Bureau. Material is supplied by the Bureau to associated publicity organizations in the British Isles, through which it is distributed to the British press. The press of the United States is reached directly by the bureau and also indirectly through the various press news agencies which the bureau serves. During the year the circulation of 106,704,024 in papers printed in English in the United States was recorded, and it may well be expected that there was also a large similar circulation of which the bureau received no intimation. Arrangements are in effect for translating and distributing the bureau's material in the United States in the Norwegian, Swedish and German languages to papers published in those languages in that country. There has been a steady development of this so-called "foreign language" circulation in the United States reaching largely a substantial class of Scandinavian and German farmer settlers. The bureau maintains a library of photographs which are placed at the disposal of the press and there were 2,242 circulated during the year.

It is recognized that much publicity may be obtained for Canada by establishing the proper contacts and interesting the right persons. For this reason the branch is continually on the lookout for journalists desirous of studying Canadian conditions at first hand, and it is found that the reports of such journalists published in the papers with which they are connected are among the most effective means of making Canada favourably known in other lands. Sometimes the visiting journalists are handled individually and sometimes in groups. A party of much importance cared for during the year consisted of a group of Norwegian-Danish editors from both Europe and the United States, assembling at Winnipeg for the Norse celebration held in that city during the summer of 1928. At the conclusion of the celebration these editors were conducted in special chartered sleeping cars through Western Canada as far as the Pacific coast and back to Winnipeg travelling one route and returning the other. In this arrangement the Department and the Canadian National Railways and the Canadian Pacific Railway Company, co-operated, the organization being done by the Publicity Branch of the department and the party being conducted personally on behalf of the department by the Assistant Director of Publicity.

REPORT OF THE COMMISSIONER OF IMMIGRATION, A. L. JOLLIFFE

The particular Branch of immigration work which comes under the direction of the Commissioner of Immigration is concerned with the inspection of those seeking entry through ocean and international boundary ports of entry, the examination of appeals of any who may be detained, the consideration of applications for the admission of relatives or others, the investigation of complaints that immigrants have become undesirable and the removal of those who become deportable.

Anything like a complete and detailed report of the year's activities is impossible in the space allotted to any one official in an annual report.

Inspectional work begins overseas. The effort to provide medical and civil inspection as near as possible to the homes of intending migrants is an undertaking of considerable magnitude. In the deputy minister's introduction

to last year's annual report, the facilities for medical inspection overseas were described. The progress so far made in oversea examination is the development of but a few years; in medical inspection, of less than two years. The greatest progress has been made in the British Isles where a staff of Canadian Government doctors is now supplemented by a roster of British doctors.

During the first year of Canadian medical inspection overseas, the system was criticized because of supposed lack of facilities due to the small number of Canadian doctors employed and on the ground that British migrants would prefer to be examined by Old Country rather than Canadian doctors. In order to meet this criticism arrangements were made to utilize the services of several hundred British doctors known as roster doctors. The examination whether by the Canadian doctor or the roster doctor is without charge. Roster doctors are within easy reach of intending migrants in all parts of the British Isles. Notwithstanding the small staff of Canadian doctors and the large and widely distributed staff of roster doctors, upwards of 85 per cent of all migrants coming to Canada now apply to Canadian doctors for medical examination.

On the Continent of Europe with its vast area it is possible to examine only at the principal ports of embarkation, Danzig, Hamburg (Bremen), Antwerp, Rotterdam and Paris (the last named is the examining station for all French ports). In continental Europe, the immigrants arrive at ports of embarkation some days in advance of the day of sailing and are accommodated in special buildings where medical and civil examinations take place. Appeals from adverse findings by examining officers both medical and civil are considered, first in the office of the Director of European Emigration for Canada in London, and later transferred to head office in Ottawa. Inspection overseas has simplified and lightened the work at Atlantic ocean ports: Quebec, Halifax and Saint John.

For administrative purposes the Dominion is divided into three Immigration Districts or Divisions as follows:—

(a) The Eastern Division includes all that part of Canada east of Port Arthur. The commissioner for this division is J. S. Fraser, with headquarters in Ottawa.

(b) The Western Division covers the territory lying between Port Arthur, Ont., on the east, and Kingsgate, B.C., on the west. The commissioner in charge of this district is Thomas Gelley, with headquarters in Winnipeg.

(c) The Pacific Division embraces all that part of British Columbia lying west of Kingsgate including the Pacific ocean ports. The commissioner in charge of this division is A. E. Skinner, with headquarters at Vancouver. Mr. Skinner also has charge of such inspectional work as is done at Seattle, Wash.

Some features of immigration work such as international boundary inspection are alike in all three divisions, while other features vary greatly. The majority of Canada's immigrants enter at the Atlantic ports. The next largest group enter on the international boundary and the smallest group at the ocean ports of British Columbia.

An examination of the landing records shows that a large number of our immigrants are destined to relatives or friends and doubtless come to Canada on the solicitation of these. The distribution of immigrants is therefore largely determined by the location of these relatives or friends. It will probably surprise many Canadians to discover how large a proportion of our immigration both pre-war and post-war has been absorbed in the eastern provinces (Ontario, Quebec and the Maritime Provinces). Ontario has for many years received more immigrants annually than any other one province of the Dominion.

The following figures taken from the Census returns of 1921 show the number of immigrants, British and Foreign, resident in each province of the Dominion when that Census was taken, and also the period of immigration.

—	Total	British	Foreign	Immigrated	
				Before 1900	Since 1900
Prince Edward Island	2,365	1,074	1,291	843	1,522
Nova Scotia	43,505	29,519	13,986	8,654	34,851
New Brunswick	21,458	10,709	10,749	5,633	15,825
Quebec	188,576	89,864	98,712	35,598	152,978
Ontario	641,683	459,577	182,106	135,858	505,825
Manitoba	222,372	113,114	109,258	39,918	182,454
Saskatchewan	299,677	100,355	199,322	31,621	268,056
Alberta	273,364	99,392	173,972	25,472	247,892
British Columbia	260,536	160,752	99,784	48,226	212,310

The following statement shows the declared destination of immigrant arrivals in the fiscal years 1921-22 to 1928-29:—

—	1928–29	1927–28	1926–27	1925–26	1924–25	1923–24	1922–23	1921–22
Nova Scotia	1,828	2,020	1,815	851	2,085	5,947	2,167	1,870
New Brunswick	2,106	1,506	1,158	766	1,023	1,881	1,016	1,210
Prince Edward Island	129	215	152	53	45	112	115	142
Quebec	18,659	18,469	16,642	11,367	16,279	19,979	9,343	13,724
Ontario	47,656	45,052	40,604	29,293	45,912	65,280	30,444	34,590
Manitoba	57,651	43,596	36,739	19,079	11,772	21,451	6,037	8,904
Saskatchewan	14,789	15,331	20,085	13,816	14,041	13,200	8,186	9,894
Alberta	16,243	15,473	16,367	12,540	10,952	10,430	8,798	11,825
British Columbia	8,627	9,891	10,376	8,165	9,222	10,233	6,652	7,730
Others	34	44	53	134	31	47	129	110

The above figures appear to show that Manitoba received a very much larger immigration than Saskatchewan or Alberta. This is only because Winnipeg is the principal distributing centre for the Prairie Provinces and many immigrants destined to Winnipeg did not settle in Manitoba, but were subsequently sent on to Saskatchewan and Alberta.

More than half of the total number of inspectional ports for admission to Canada are in the Eastern Division and much the larger part of immigration enters through these ports. In the Western Division, inspectional work is confined to the international boundary. The work in that division is, therefore, not mainly inspectional work, but has to do with the distribution and placement of immigrants and the adjustment of difficulties. At Winnipeg three large immigration halls are maintained for the temporary accommodation of those requiring shelter on arrival. Additional halls are kept open either during the season or all the year round at various outposts of settlement. A total of 19,121 immigrants received temporary accommodation in the Winnipeg halls and 7,653 were given temporary shelter in other Immigration halls maintained by the department. In Winnipeg a total of 122,754 meals were supplied.

During the year 19,483 persons registered at the Labour Bureau maintained in connection with the Winnipeg Immigration halls, in addition to which 1,312 young women from Central Europe were sent out to domestic work.

In the Pacific Division we have our principal contact with immigration from the Orient. The three principal branches are Chinese, Japanese and Eas

Indians. A reference to statistical tables two to five inclusive will show the Oriental immigration from 1900 to 1928-29. Included in the annual report is a special report on Chinese immigration.

The following figures will give some indication of the work involved in the various Divisions:—

EASTERN DIVISION

Ocean Ports—	
Admissions	135,576
Rejections	313
Non-immigrants	74,695
Investigations	1,267
Board of Inquiry hearings	583
International Boundary—	
Admissions	18,549
Rejections	16,883
Non-immigrants	26,475,649
Investigations	24,556
Board of Inquiry hearings	1,333

WESTERN DIVISION

Admissions	9,273
Rejections	662
Non-immigrants	875,448
Investigations	6,386
Board of Inquiry hearings	1,014

PACIFIC DIVISION

Admissions	4,275
Rejections	612
Non-immigrants	1,378,128
Investigations	262
Board of Inquiry hearings	376

The opening up of new highways on the international boundary and the tremendous increase in the tourist and other non-immigrant traffic, has necessitated numerous additions to the staff at the ports affected. The largest movement through any international boundary port was through Windsor where almost eight millions of non-immigrants entered during the fiscal year. Bridgeburg and Niagara Falls follow with between five and six millions each. Quite a number of other international boundary ports have a record of from 250,000 to 2,500,000,

A great deal of investigational work is performed by the department and this includes inquiries into applications for deportation, investigation of complaints, and dealing with applications arising in Canada for the admission of immigrants. The major part of this work is performed by special investigating officers located at various central points throughout the three divisions. The deportation work is mentioned later in this report. Experience has shown the necessity of careful investigation into applications filed for the admission to Canada of immigrants, and during the period under review the department has refused several thousand such applications after establishing the same were not *bona fide* or that the intending immigrants were not admissible under the law.

Officials of the department are constantly watching for attempts to secure the admission of inadmissible aliens and many such efforts have been frustrated. In one instance fraudulent copies of departmental letters were printed in Canada and signatures of officials were forged. The fraud was discovered when the aliens appeared for examination before Canadian Immigration officers stationed on the Continent of Europe and presented the forged documents. Subsequent investigation resulted in extradition in one case and in the prosecution and conviction of two of the guilty parties.

Table 43 of the statistical report shows the annual deportations over an extended period. The total for 1928-29 was 1,964. Deportation is provided for in the Immigration Act, in the Opium and Narcotic Drug Act and in the

Chinese Immigration Act, for causes specified in these Acts. A distinction is made in tables 41, 42 and 43 between deportations which follow rejection at the port of entry and deportations that arise after immigrants have entered Canada. Most deportations for cause arising in Canada are brought about on complaints made by local municipal authorities in accordance with the provisions of sections 40 and 41 of the Immigration Act. The persons concerning whom complaint has been made under the Immigration Act are examined by Board of Inquiry on the order of the Minister or Deputy Minister of Immigration. A board of inquiry may be described as a court established under the Immigration Act, and the board may administer oaths and take evidence under oath or by affirmation in any form the board deems binding upon the person being examined. An appeal may be taken to the Minister of Immigration against the decision of any board of inquiry and a notice of an appeal acts as a stay of all proceedings until a final decision is rendered by the minister.

When a person ordered deported is an inmate of a penal institution, deportation takes place at the expiration of the sentence. In all other cases immediate steps are taken by the Department for the removal of the deport. Sometimes there are delays through difficulty in securing the readmission of the deport to the country from which he came. Once a deport is taken into custody by an Immigration official the entire responsibility for maintenance, care and return to the country to which he is being deported, falls upon the Department of Immigration and Colonization. Certain obligations rest upon the transportation companies to provide transportation for deports.

Of the 1,964 persons deported between April 1, 1928 and March 31, 1929, four had arrived between January and March, 1929. The calendar year of arrival of the balance was as follows:—

1928	627	1925	111
1927	507	1924	142
1926	300	1923	83
Previous years		194	

The principal causes for deportation will be seen by reference to statistical table 43 and the same table shows the Canadian provinces from which deports were returned.

REPORT OF THE SUPERVISOR OF THE WOMEN'S BRANCH
MISS M. V. BURNHAM

In 1919 the Department of Immigration and Colonization established a branch devoted to women's immigration under the direction of a woman supervisor with headquarters at Ottawa. The following report gives an outline of the activities of this branch in the British Isles and in Canada, and shows an increase in the work during the past fiscal year.

In the British Isles

The eight Canadian women officers stationed at London, Liverpool, York, Glasgow and Belfast, have interviewed houseworkers applying for the reduced rate under the Empire Settlement Scheme, also women coming to Canada to join their husbands under the Family Re-union Scheme, and others who wished information regarding labour conditions in Canada. Each woman officer has a definite area and conducts interviews and gives lectures as required in smaller centres in order to increase the supply of houseworkers for this country.

According to records 4,750 Empire Settlement Warrants were issued to women coming to this country for house work. This compares favourably with 4,220 warrants issued during the fiscal year ended March 31, 1928. It is reported that there is an increasing shortage of houseworkers in the British Isles, therefore,

the department has accepted some women with very little domestic experience, because they were of good character, adaptable and willing to learn. As there is no falling-off in the demand for houseworkers in this country, and as the supply is limited, it was decided to co-operate with the British Government in a scheme for training houseworkers in the British Isles. (Information concerning the training hostels which have been established will be found in the report of the Commissioner of Colonization.)

Steamship Conductresses

For a short time after the establishment of the Women's Branch, Canadian Government conductresses were employed on passenger ships bringing women from the British Isles to Canada. Now four of the principal steamship companies in the Canadian transatlantic service carry conductresses as ship's officers. The duty of these women is to look after the welfare on board ship of women and girls travelling by themselves, and to report to the Canadian woman officer at the Canadian port of arrival any cases which need assistance in landing or special supervision and aftercare.

In Canada

Women officers are stationed at Quebec, Halifax and St. John, to meet and assist unaccompanied women and children landing at these ports. The woman officer meets every incoming ship and confers with the steamship conductress regarding those needing assistance. The woman officer makes arrangements with the railroad companies for special cars for unaccompanied women. She assigns to the train conductresses their work.

The following tables gives some idea of the volume of work which has been done during the past year:—

—	Ships met	Conducted parties	Special cars arranged for	Unaccompanied women and children		Children travelling alone
				British	Foreign	
Quebec	198	251	233	9,996	7,425	311
St. John	33	45	34	1,365	1,034	37
Halifax	251	100	107	1,921	9,318	98
Totals for fiscal year 1928-29	482	396	374	13,282	17,777	446
Totals for fiscal year 1927-28	384	374	271	12,264	13,603	432
Increase	98	22	103	1,018	4,174	14

Immigration Conductresses

During the busy season twelve conductresses were on duty. From the end of November to the beginning of March the number was reduced to seven as during the winter months there was a falling off in the number of arrivals. The train conductresses have their headquarters at the ports and are under the direction of the woman officer. Their duties are to help women and children at the port, to co-operate with the train officials in loading the trains and to travel on the train as far as necessary; few trips are beyond Winnipeg. The conductress keeps a watchful eye over the girls, assists the tired mothers, helps with the children and gives first aid to the sick. In short the conductress looks after the general welfare of the people on the train. Several of the conductresses are trained nurses.

Owing to the distances in Canada and the long train journey the newly arrived settlers become fatigued and at times discouraged; it is at this point the conductress can be of great assistance by tactful and kindly advice. Since

the spring of 1926 each conductress has been equipped with a large tea kettle for use on the stoves in the Colonist cars in order that there may be boiling water to make tea en route and for babies' bottles.

The following extracts from conductresses' reports are of interest:—

"Maris M . . . . . a girl aged 4, travelling with her parents, developed Chicken Pox. She did not appear ill, was able to play about but was covered with spots. I isolated her as much as possible, wired Winnipeg and kept the family on the train until the doctor arrived."

Another extract:—

"The weather turned very warm and many of the children suffered from the heat; the infants particularly, being wound up in heavy linen on pillows. I had the mothers remove these binders as, with the high temperature, the babies were in an exhausted condition."

Another extract:—

"We were less than half an hour out from Halifax when I got a hurried call from a family car—a baby had convulsions. I got it down on a pillow, used warm compresses and bathed its face and neck. Dr. . . . . came on at Truro where the train was held while he made an examination, I gave the history as I knew it and advised what I had done, which the doctor said was the best possible. As the child was seriously ill the whole family were taken off the train."

The conductress' duties, during the past year, have been made increasingly difficult by foreign girls, some of whom refused to go to their destinations and were prepared to leave the train with anyone speaking their language, or offering them employment. This condition of affairs has necessitated the greatest vigilance, night and day, and is very wearing for the conductress. In order to take care of these girls more effectively the department made an arrangement with the transportation companies to have foreign girls destined to Winnipeg come out in parties of twenty-five, so they could be sent in charge of a conductress to their destination.

One conductress reported:—

"A party of twenty-four girls, destined to Winnipeg, kept the whole station in a state of upheaval for the entire day and until the departure of the special train. Had considerable difficulty with supposed relatives attempting to communicate with these women and trying to take them out of the station. After the girls were placed on the train several men with automobiles attempted to take these young women away, tossing clothing through the windows. The city police were employed to keep people from entering the windows to take the girls, also railroad constables on the station platforms."

Another said:—

"Three of my women escaped at Montreal and I found two more trying to crawl through a window about three minutes before the train left—a man told me they were planning to join others and go to Windsor."

Statement of Housework Girls by Racial Origins for the Fiscal Year

English	2,407	Magyar	253
Scotch	2,825	Czecho-Slovakian	221
Irish	1,739	Lithuanian	102
Welsh	109	Negro	126
French	147	Jugo-Slav	124
Belgian	43	Greek	57
Dutch	167	Russian	49
Danish	406	Esthonian	35
Norwegian	397	Roumanian	29
Swedish	309	Italian	21
Icelandic	7	Bulgarian	18
Finnish	1,290	Lettish	14
Swiss	52	Bohemian	4
German	1,484	Others	32
Esthonian	1,786		
Polish	883	Total	16,245
Hebrew	387		

Empire Settlement Scheme

Since the spring of 1923 houseworkers from the British Isles have been given assistance under this scheme. From 1923 to 1926 this took the form of a loan for ocean and railroad fare repayable without interest. During these calendar years our records show assistance to the following numbers:—

1923	1924	1925
–	–	–
1,053	3,379	1,451

In January, 1926, the reduced rate was arranged and houseworkers were required to pay £3 for a third-class ocean passage. The cost of inland rail ticket (which in no case would exceed £6) could be given in the form of a loan if necessary. In 1927 the rate was again reduced and the present ocean rate of £2 came into effect. Loans are still made for the amount over and above the £2. The departmental records show the following number of arrivals under the low passage rate for the calendar years:—

1926	1927	1928	1929
–	–	–	–
3,405	3,289	5,197	889 (to 31 March)

The following table shows the distribution of British houseworkers for the past two fiscal years:—

Provinces	1927-28					1928-29				
	Nominations by oversea agents	Nominations arising in Canada	Salvation Army nominations	Ontario Government nominations	Total	Nominations by oversea agents	Nominations arising in Canada	Salvation Army nominations	Ontario Government nominations	Total
Nova Scotia	20	23	.....	.....	43	.....	23	.....	.....	23
New Brunswick	7	10	.....	.....	17	4	13	1	.....	18
Prince Edward Island	.....	3	.....	.....	3	7	2	.....	.....	9
Quebec	477	116	3	.....	596	573	121	14	.....	708
Ontario	1,262	526	282	312	2,382	1,302	530	331	419	2,582
Manitoba	115	72	20	.....	207	126	62	38	.....	226
Saskatchewan	184	177	.....	.....	361	164	184	4	.....	352
Alberta	210	116	.....	.....	326	232	129	2	.....	363
British Columbia	81	124	37	.....	242	51	83	55	.....	189
Totals	2,356	1,167	342	312	4,177	2,459	1,147	445	419	4,470

N.B.—This statement refers to arrivals only and the figures do not, therefore, exactly correspond with the number of warrants issued during the year.

Nominations.—Houseworkers coming out otherwise than by nominations arising in Canada, are destined to the Canadian Women's Hostels, the Catholic Women's League Hostels, Y.W.C.A., and Salvation Army Hostels, the Department paying for a rest period varying from twenty-four to forty-eight hours. Girls moved on direct and descriptive nominations, proceed direct to destination and seldom register at a Hostel.

Placement.—The Employment Service place most of the houseworkers, whose references are sent in advance by the department. The Superintendent of the Hostel in Montreal and in Calgary also place houseworkers; and in Hamilton, Ont., the Dominion Immigration Agent assists in this work.

Aftercare.—Under the Passage Agreement the department assumes responsibility for aftercare. Houseworkers destined to hostels and those coming out under nomination are listed in fifteen districts where there are Dominion Immigration offices. In six districts, which are the busiest centres, Women Officers and Investigating Officers are on the staff. Quarterly reports are sent to the supervisor from all the offices on problem cases and in this way a close check is kept. When selection is found to be at fault the necessary remedy is applied.

The department is assisted in problem cases by Church and W izations; the Social Service Department of the various hospitals, etc work. In the care of the unmarried mother and child, the co-operat of the Infant's Home and the Catholic Welfare Bureau must be n appreciation. In Montreal the Women's Directory and the S Protection of Women and Children do excellent work. These or have paid staffs of trained workers, and each girl assisted is given intelligent and efficient advice, in her effort to become re-establi

During January, February and March, 1929, records show th 650 problem cases were handled by our officers. Young women v during the past five years were included. Of this number only sixte deported during the same three months. The following report giv of the amount of work done in the Toronto and Montreal offices by t Branch. These centres have the majority of our Empire Settlemen

Toronto		Montreal	
April 1, 1928 to March 31, 1929		April 1, 1928, to March ?	
Investigations	2,867	Investigations	
Office interviews	3,860	Interviews	
Letters received	11,098	Letters sent	
Letters sent	14,252	Trains met	
		Special cases met	
		Boats met	

Canadian Red Cross

The statistics hereunder are supplied by the Canadian Red and show the work done in the Red Cross Nurseries at the por Halifax and St. John:—

Nursery	Ships	Infants and children cared for	Women assisted	Treatments given	Fo ca sen
Halifax	241	5,841	8,858	287	1,040
Quebec	196	12,340	7,303	438	3,421
St. John	33	2,142	1,584	99	458
Totals	470	20,323	17,745	824	4,919

Each nursery is in charge of a trained nurse who is always ready to give advice to the women who bring their babies and small children to rest in between the time they have passed the immigration inspection and the departure of their trains. There is close co-operation between the nurses-in-charge and the Women's Branch. Any reports concerning sickness of children are given to the train conductress before she leaves.

The nurseries supply tea, milk and biscuits to the small children, and also to many weary travellers. British and foreign alike receive care and attention, and appreciation of this work is heard on all sides by those who visit the nurseries on a busy day.

The equipment and space are provided free by the Department of Immigration, but as stated in previous reports, the credit of the work is due entirely to the Red Cross Society. The Imperial Order of Daughters of the Empire deserve special mention as they supply valuable helpers to assist in the nurseries.

The United Service Fund

was established at the end of the war as a result of the surplus ens, and is administered for the benefit of ex-service women who the Women's Auxiliary Army Corps, Women's Royal Air Force, l Navy Service and Queen Mary's Auxiliary Army Corps. The he Women's Branch is empowered by this organization, to give nce out of this fund to any members of the above organizations nt in Canada and in need of financial assistance.
ervice Women's Clubs at Montreal and Toronto are doing good ging cheer to members who have through ill health become dis- ot into difficulties.

Travellers' Aid

avellers' Aid workers are to be found at all the important stations in ssist the travelling public. Their close co-operation with the depart- eciated in giving assistance to many of the newly arrived settlers.

Co-operation with the Department of Health

h continues to forward to Dr. Helen MacMurchy, Chief of the Welfare, Department of Health, the names of all women who try to be married. Last year 368 names were sent and the ion from these young women, so far from friends and relatives how that this work is well worth while.

Employment Service

yment Service of Canada has always co-operated very fully en's Branch and furnishes statements and reports as required. ial references of houseworkers are all sent direct from Ottawa to Employment Bureaus and when the houseworker registers the eady has her record and is able to place satisfactorily.

Canadian Women's Hostels

The Canadian Women's Hostels receive Dominion grants, they are established in the following centres: Halifax, Montreal, Toronto, Winnipeg, Regina and Calgary. In some cases they are also in receipt of provincial grants. These hostels are all managed by local committees and monthly reports are sent in by the superintendent to the supervisor at Ottawa. The work in each centre varies according to conditions. The department also pays for from twenty-four to forty-eight hours free accommodation for all houseworkers. The hostels are used as clubs by the girls, and as centres for their mail. Lectures are arranged and entertainments given from time to time.

Canadian Women's Hostel, Montreal, report for fiscal year		Canadian Women's Hostel, Toronto, report for the year ended Oct. 31, 1928	
Women in transit	2,317	Women for Hostel	1,387
Women for Hostel	701	Transients	267
Transients	904	Meals served	22,736
Beds supplied	11,321	Beds supplied	7,896
Meals supplied	23,478	Letters received	15,671
Employers' orders received	2,534	Number of visits made by Hostel Worker	409
Number of girls placed	835	Number of visits made by Church workers	660

Society for the Overseas Settlement of British Women

The Women's Branch is in close touch with the Society for the Overseas Settlement of British Women, which, since December, 1919, to quote from their own report, has been recognized as the Women's Branch of the Overseas Settlement Department and is representative of all the organizations in the British Isles connected with the migration of women.

During the fiscal year 1928-29 six conducted parties were sent out by this organization. Such parties are composed of women and children joining the husbands and fathers who are in employment in Canada, also unaccompanied women who wish to travel under their supervision. The S.O.S.B.W. gives loans to women and children who are coming out to this country to join the head of the family who is satisfactorily settled, and the department has, during the past year, investigated the settlement arrangements for 219 British families in which are included 522 children. Of this number 30 families subsequently were able to raise their own fare and did not require passage loans. Eight of the families were granted the reduced rate under the Government Family Re-Union Scheme. Of the above, 75 families including 181 children arrived during the fiscal year.

The society reports that during the past calendar year (1928) they made arrangements for the reception on arrival at the port of landing overseas of 162 women who were deported from Canada for various reasons. The meeting of the deportees is usually undertaken on behalf of the society by the Travellers' Aid or the National Vigilance Association and the work of aftercare is generally carried out by the Society's representative or by some appropriate local organization. This welfare work is exceedingly important, and the organizations in Canada who have assisted in looking after girls who were subsequently deported, will be glad to know of this arrangement.

In Toronto, under the auspices of the Sick Children's Hospital, a free training is given to young women who wish to become experienced nursery nurses. The girls are required to be in residence one year, they are trained in housework and the care of children, and receive a short training in the Sick Children's Hospital in the care of sick children. At the end of the training a minimum wage of $38 a month is guaranteed. There is accommodation for twenty-four girls and the S.O.S.B.W. have selected during the past year, fifteen girls who are taking this training.

The Women's Branch is looking forward with great pleasure to a visit from the General Secretary of the S.O.S.B.W., Miss Franklin, who expects to come to Canada to confer on many questions and to look into the opportunities for the settlement of British women in this country. The importance of personal contact is becoming more and more important in all lines of work, as often more is accomplished in a personal interview than in months of correspondence.

Canadian Council of Immigration of Women

On this council are represented the following national organizations:—

Canadian Council of Agriculture.
Canadian Council of Child Welfare.
Canadian National Committee on Mental Hygiene.
Canadian Red Cross Society.
Canadian Legion of the British Empire Service League.
Federated Women's Institutes of Canada.
Catholic Women's League of Canada.
Imperial Order of the Daughters of the Empire.
National Council of Women.
Social Service Council of Canada.
Trades and Labour Congress of Canada.

Women's Auxiliary to the Missionary Society of the Church of England.
Women's Christian Temperance Union.
Women's Missionary Society of the United Church of Canada.
Women's Missionary Society of the Presbyterian Church of Canada.
Young Women's Christian Association.

In addition to the above the provinces are regarded as members and are invited to send representatives to all conferences. The executive committee of this council held a meeting on February 28 and March 1, 1929, when matters which concern the Council were discussed.

Appreciation of the Work Done by Those Interested in Immigration

It is impossible in this report to record all that is done in immigration work by the different organizations in Canada. At the Atlantic ocean ports the following churches have representatives to assist the newly arrived settlers: Church of England, Presbyterian Church, Roman Catholic Church, United Church, Salvation Army.

The following societies also have workers at the port: Bible Society, Imperial Order of the Daughters of the Empire, Jewish Immigrant Society, Sisters of Service, Young Women's Christian Association, Young Men's Christian Association.

The railway station work done by the Imperial Order of the Daughters of the Empire at Montreal is of great assistance to the travellers.

Social service work in the Dominion is well organized and the department receives the co-operation of the welfare agencies in all centres. This is specially appreciated in connection with the young girls who come to Canada for housework and are far from home and relatives.

REPORT OF THE SUPERVISOR OF JUVENILE IMMIGRATION, G. BOGUE SMART

In the twelve months, from April 1, 1928, to the close of the fiscal year the number of juveniles migrating exceeded the total arrivals during the previous year, as may be seen by the following comparative statement:—

Society	1928-29	1927-28
Armenian	.....	14
Dr. Barnardo's Homes	141	108
British Immigration and Colonization Association	1,176	751
Catholic Emigration Association	314	238
The Church Army	210	180
Church of England Waifs and Strays Society	90	76
Church of England Council of Empire Settlement	182	120
Dr. Cossar	129	65
Captain Oliver Hind, The Dakeyne Farm	11	19
Mr. J. W. C. Fegan	42	44
Sir J. T. Middlemore	23	12
National Children's Home and Orphanage	82	34
The Quarrier Home	43	66
Salvation Army	203	103
United Church of Canada	228	.....
Unaccompanied	142	240
Totals	3,036	2,070

These young settlers were distributed throughout the provinces of the Dominion, as shown hereunder:—

Ontario	2,154	Manitoba	120
Quebec	284	Saskatchewan	187
Nova Scotia	29	Alberta	101
New Brunswick	128	British Columbia	32
Prince Edward Island	1		

These figures do not include juveniles coming into the country under provincial Government schemes, of whom 401 arrived during the year.

These young people, with few exceptions, migrated under the Empire Settlement Agreement, their migration having been effected through the auspices of persons and organizations approved by the British Government and the federal Government of Canada.

The representatives of most of the emigrating societies accompany the children en voyage to Canada, and to the distributing centre, whence they are distributed to approved situations. Boys are placed in farm employment and girls in household service.

Three important factors have had much to do in bringing the movement to its present success, viz : (1) the selection of boys and girls for Canada; (2) placement; and (3) supervision and aftercare.

Descriptive lists of the selected children are prepared and the children are brought together for individual inspection and approval by overseas officers of this department. Before embarkation there is a careful medical examination. In this way care is taken to establish that the children are physically and mentally sound and suitable for migration.

Direct responsibility for the care and supervision of the children falls upon the organizations through which they are brought to Canada and they are required to maintain a systematic visitation.

The following conditions are applicable to all juvenile immigrants, who come to Canada under the auspices of approved organizations:—

(a) He must be of the full age of 14 years.

(b) He must pass medical examination as to his mental and physical soundness before leaving the Old Country.

(c) He must also be able to read and write.

(d) Each society must provide a suitably equipped Receiving and Distributing Home or Centre, to which the juveniles are to be conducted on arrival, and from which they are sent to the situations selected for them by the authorized representative of the society, and to which they may return pending replacement, or for any other reason.

(e) The organization must assume responsibility for placing juveniles in employment in satisfactory farm situations in the case of boys, and in household work in rural or urban homes in the case of girls. In this connection all recommendations and other documents having to do with each situation in which a boy or girl is placed must be kept on file in the Receiving Home, and available for inspection.

(f) The juveniles must be placed under a written agreement in which the wage to be paid and other conditions of employment are specified.

(g) The society is required to undertake and maintain a systematic supervision of each juvenile. This supervision is to include personal visits and private interviews with them. Written reports on employment and situation by the society's visitors are kept at the Receiving and Distributing Home, and are available for inspection by an officer of the Department of Immigration and Colonization whenever required. Qualified visitors, responsible to the society must be employed by the Society for the purpose of supervision.

(h) The society is required to supply the Department with a list of the names and ages of its wards, together with the names and post office addresses of their employers, and to advise the Department in case of change of employer, whenever such occurs.

Too great emphasis cannot be placed upon proper placement and supervision as even the best of material may be spoiled by improper environment and careless supervision.

In this connection the majority of the migrating agencies appear to fully appreciate the importance of promptly indenturing their boys and girls and keeping in close personal touch with both employer and employee.

Each juvenile is personally inspected in his situation and privately interviewed by a representative of the department in respect to his home, work, treatment and general progress. Special consideration is given to the boy's opportunities to become interested in agriculture and to receive a useful training in the general work of the farm, and to make him contented with country life.

Individual reports are received daily from our inspectors in the field, in order that any irregularity in the placement or treatment of the juvenile may be dealt with promptly.

Changes of situation during the year are accounted for mainly by the following reasons:—

(1) Completion of indenture.
(2) Unsuitability of situation.
(3) Injudicious treatment.
(4) Disagreement in regard to wages.
(5) Dissatisfaction on part of boy.

The department's records indicates 3,969 transfers and returns to Hostel in the course of the year.

Table showing the number of children and juveniles who have been brought to Canada by the principal societies and agencies since the inauguration of the movement:—

—	Year	Children immigrated
Miss Macpherson and Mrs. Birt, London and Liverpool (Canadian Headquarters, Marchmount Home, Belleville, Ontario)	1868 to 1926	14,578
Miss Rye and Church of England, Niagara-on-the-Lake, and Toronto, Ont., and Sherbrooke, P.Q	1868 to 1929	4,308
Mr. (later) Sir J. T. Middlemore, Fairview, Halifax, N.S	1873 to 1929	5,132
The National Children's Home and Orphanage (formerly Dr. T. Bowman Stephenson), Hamilton, Ont	1873 to 1929	3,288
Mrs. Bilbrough-Wallace (Marchmont Home, Belleville, Ont.)	1878 to 1915	5,529
Cardinal Manning (Ottawa and Montreal)	1880 to 1888	1,403
Dr. Barnardo, Toronto, Ont., and Winnipeg, Man	1882 to 1929	26,931
Mr. J. W. C. Fegan, Toronto, Ont	1884 to 1929	3,122
Mr. Wm. Quarrier, Brockville, Ont	1890 to 1929	4,383
The Catholic Emigration Association and amalgamated societies, St. George's Home, Ottawa, Ont	1897 to 1929	7,551
The Salvation Army	1905 to 1929	3,352
Dr. Cossar, Lower Gagetown, N.B	1910 to 1929	840
Captain Oliver Hind, The Dakeyne Farm, Falmouth (near Windsor), N.S	1913 to 1929	121
British Immigration Aid and Colonization Association, Montreal, P.Q	1923 to 1929	2,885
The Church Army, Winnipeg, Man	1925 to 1929	669
Church of England Council of Empire Settlement, Edmonton Alta.,, Indian Head and Melfort, Sask	1926 to 1929	321
United Church of Canada, Norval, Ontario	1929	228
Minor agencies	1897 to 1929	6,094
Total		90,735

The number of children and juveniles migrated to Canada by the principal organizations in Great Britain during the past twenty-nine years were as follows:—

Fiscal year	Children emigrated	Fiscal year	Children emigrated
1900–1	977	1915–16	821
1901–2	1,540	1916–17	251
1902–3	1,979	1917–18	.....
1903–4	2,213	1918–19	.....
1904–5	2,808	1919–20	155
1905–6	3,264	1920–21	1,426
1906–7	1,455	1921–22	1,211
1907–8	2,375	1922–23	1,184
1908–9	2,424	1923–24	2,080
1909–10	2,422	1924–25	2,000
1910–11	2,524	1925–26	1,862
1911–12	2,689	1926–27	1,741
1912–13	2,642	1927–28	2,070
1913–14	2,318	1928–29	3,036
1914–15	1,799		

COMPARATIVE Statement for Fiscal Years 1925-26 to 1928-29, inclusive

	Fiscal year			
	1925-26	1926-27	1927-28	1928-29
Inspections	6,897	6,254	5,807	6,134
Visits	1,482	1,271	1,329	1,892
Inspections and visits	8,379	7,525	7,136	8,026
Under supervision April 1	5,896	5,990	5,818	5,585
Added to supervision list (new arrivals)	1,862	1,741	2,070	3,036
Added to supervision list (reinstated)	93	15	20	9
Total under supervision in fiscal year	7,851	7,746	7,908	8,630
Removed from supervision (inspections completed during fiscal year)	1,861	1,928	2,323	2,383
Under supervision March 31 of fiscal year	5,990	5,818	5,585	6,247

The movement of children from the United Kingdom to Canada is promoted under the auspices of the Dominion Government, a provincial Government or approved voluntary agencies under the terms of the Empire Settlement Agreement.

The assistance is in the form of a free grant of the total cost of transportation, which is shared equally by the Dominion and Imperial Governments, and applies to:—

(a) Boys who have reached their fourteenth birthday and have not reached their nineteenth birthday prior to sailing and girls who have reached their fourteenth birthday and have not reached their seventeenth birthday prior to sailing a grant of eighty Canadian dollars per capita when proceeding to points east of Manitoba and a rate of one hundred dollars when proceeding to points west of Ontario, under the auspices of the Dominion Government, a provincial Government or an approved voluntary society.

(b) A boy who has reached his fourteenth birthday and has not reached his nineteenth birthday prior to sailing or a girl who has reached her fourteenth birthday and has not reached her seventeenth birthday prior to sailing who is proceeding with the consent of parents or guardians to a home approved by the Dominion Government or who is proceeding under an agreement between the Secretary of State and a provincial Government, free transportation at the lowest third-class ocean rate from the port of embarkation in the United Kingdom and Canadian colonist rate to rail destination in Canada.

The preparation, outfitting, transportation, reception, care and placing of children are in the hands of the Dominion or provincial Government or the society as the case may be before and after their migration to Canada subject to the approval and inspection by the proper officers of the Dominion Government from time to time during and after the term of Agreement and all such children are subject to the regulations in operation both in the United Kingdom and in Canada regarding child migrants and immigration generally.

DOMINION OF CANADA

ANNUAL REPORT

OF THE

DEPARTMENT OF INDIAN AFFAIRS

FOR THE

YEAR ENDED MARCH 31

1929

OTTAWA
F. A. ACLAND
PRINTER TO THE KING'S MOST EXCELLENT MAJESTY
1930

To His Excellency the Right Honourable Viscount Willingdon, G.C.S.I., G.C.M.G., G.C.I.E., G.B.E., etc., etc., Governor General and Commander in Chief of the Dominion of Canada.

MAY IT PLEASE YOUR EXCELLENCY:

The undersigned has the honour to present to Your Excellency the Annual Report of the Department of Indian Affairs for the fiscal year ended March 31, 1929.

Respectfully submitted,

CHARLES STEWART,
Superintendent General of Indian Affairs.

OTTAWA.

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PART I

REPORT

OF THE

DEPUTY SUPERINTENDENT GENERAL OF INDIAN AFFAIRS

FOR THE YEAR ENDED MARCH 31, 1929

REPORT OF THE DEPUTY SUPERINTENDENT GENERAL

OTTAWA, December 18, 1929.

Hon. CHARLES STEWART,

Superintendent General of Indian Affairs,

Ottawa.

SIR,—I have the honour to submit the report of the Department of Indian Affairs for the year ended March 31, 1929.

In the following pages will be found a brief outline of the more important administrative activities of the department during the period under review.

The Agreements made on the 14th of December, 1929, between the Dominion of Canada and the Provinces of Alberta and Manitoba on the subject of the transfer of the Natural Resources contain important provisions with regard to Indians and Indian reserves, which are reproduced herein.

The taking into treaty of the Ojibwa and Cree Indians residing in the vicinity of Trout Lake in the remote regions of the Patricia District provided a noteworthy feature of the year's work, which received much publicity in the press. In view of the interest that has been aroused by this event, the report of the Royal Commission which made the treaty with the Indians on behalf of the Governments of the Dominion of Canada and the Province of Ontario is included in these pages.

The quinquennial census of the Indians of Canada taken during the present year and published in Part II of this report shows a considerable increase over that of 1924. The fact that the Indians are more than holding their own in point of numbers is gratifying, particularly as it also may be said that, on the whole, they are making satisfactory economic and sociological progress. This favourable generality, however, does not apply in the case of the hunting and fishing Indians whose special problems are discussed in the following paragraphs.

THE PLIGHT OF THE HUNTING AND FISHING INDIANS

The condition of the Indians in the northerly and outlying districts who are still dependent upon the chase for their livelihood has become a matter of grave concern to the department.

During recent years there has been an alarming increase in the number of white trappers who are encroaching upon hunting grounds in the northern parts of the various provinces, which were formerly used by Indians only. White trappers are using poison extensively, and this illegal and vicious practice is becoming a grave menace to game conservation. Not a single instance of the use of poison by any Indian trapper anywhere in Canada has ever come to the attention of the department. It is felt that unless some protection is afforded, the Indian trappers in the northern regions, where other means of livelihood are not available, may become dependent, owing to the depletion of the game.

Hunting and fishing are the aboriginal vocations of the primitive Indians. By immemorial usage the Indians are conservationists of the game and fish, and may be expected to continue so, if protected; on the other hand, if whites are allowed to deplete the fish and game on Indian hunting grounds, the Indians themselves will naturally take all they can, while they can, and there is grave danger that such a situation may bring about intensive competition between whites and Indians, ending in the virtual extermination of valuable species. Indian families, in most cases, are permanent residents, and their hunting grounds are recognized among themselves, and handed down from one generation to another, whereas white trappers are frequently of the itinerant class, whose practice is to trap out an area and then move elsewhere.

In the opinion of the department, the only satisfactory solution of these problems will be to set aside adequate areas in which Indians only shall be allowed to hunt. This plan has already been carried out, with success, by the Dominion Government in the Northwest Territories, where Indian hunting reserves, for the exclusive use of the aborigines, have been set aside by Orders of His Excellency in Council with satisfactory results.

In the province of Quebec two Indian hunting reserves were set aside by Order of the Lieutenant-Governor in Council dated the 21st day of April, 1928. These reserves may be described as follows:—

"The first, named Abitibi reserve, bounded on the south and north by the 49th and 50th lines of latitude, on the east by the 78th line of longitude, and on the west by the frontier line between Quebec and Ontario, the whole comprising an approximative extent of 4,000 miles.

"The second, named Great Lake Victoria Reserve, bounded on the south by the 47th and 48th lines of latitude, on the east by the extension towards the south of the division line of the townships Cambray and Vimy to its meeting with the 47th line of latitude, on the west by the extension towards the south of the division line of the townships Chabert and Landanet to its meeting with the 47th line of latitude, the whole forming an approximative extent of 6,300 miles.

"The Honourable Minister recommends moreover that a licence to trap be issued free to any Indian who may hunt in such reserves, and at the end of the season, that a report of the quantities and kinds of fur taken by each of them be made by them or through their missionary.

In considering this question, it should be understood that the department only desires special hunting privileges for Indians in the outlying districts where other sufficient employment is not available. In the settled and organized localities, the department affords the Indians ample opportunity for agricultural and industrial pursuits, and discourages them from dependence on the chase.

Another source of hardship to Indian bands in various parts of the country is the commercialization of fishing waters in the vicinity of Indian reserves without consideration for the needs of the Indian population. In some cases exclusive licences have been granted to white fishing interests covering waters fronting reserves upon which the Indians had originally located themselves expressly on account of the fishing advantages. To be cut off in this arbitrary manner from their natural food supply is a serious and unmerited misfortune for the Indians concerned. These conditions, needless to say, are not within the control of this department which, however, loses no opportunity to obtain redress and protection for its wards.

An important and gratifying departure in the interests of the hunting and fishing Indians of Alberta and Manitoba is revealed in the recent Agreement made on the 14th of December, 1929, between the Dominion of Canada and the provinces aforesaid, both of which contain a provision for the taking of game and fish *for food* by Indians at all times of the year. The clause, in each Agreement, reads as follows:—

"In order to secure to the Indians of the province the continuance of the supply of game and fish for their support and subsistence, Canada agrees that the laws respecting game in force in the province from time to time shall apply to the Indians within the boundaries thereof, provided, however, that the said Indians shall have the right, which the province hereby assures

to them, of hunting, trapping and fishing game and fish for food at all seasons of the year on all unoccupied Crown lands and on any other lands to which the said Indians may have a right of access."

Transfer of the Natural Resources of Manitoba and Alberta

The Agreements made on the 14th day of December, 1929, between the Dominion of Canada and the Province of Manitoba and between the Dominion of Canada and the Province of Alberta on the Subject of the Transfer of the Natural Resources each contain the following important provision with respect to Indian Reserves:—

"Indian Reserves

"All lands included in Indian reserves within the province, including those selected and surveyed but not yet confirmed, as well as those confirmed, shall continue to be vested in the Crown and administered by the Government of Canada for the purposes of Canada, and the Province will from time to time, upon the request of the Superintendent General of Indian Affairs, set aside, out of the unoccupied Crown lands hereby transferred to its administration, such further areas as the said Superintendent General may, in agreement with the Minister of Mines and Natural Resources of the Province, select as necessary to enable Canada to fulfil its obligations under the treaties with the Indians of the province, and such areas shall thereafter be administered by Canada in the same way in all respects as if they had never passed to the province under the provisions hereof.

"The provisions of paragraphs one to six inclusive and of paragraph eight of the agreement made between the Government of the Dominion of Canada and the Government of the Province of Ontario on the 24th day of March, 1924, which said agreement was confirmed by statute of Canada, fourteen and fifteen George the Fifth chapter forty-eight, shall (except so far as they relate to the *Bed of Navigable Waters Act*) apply to the lands included in such Indian reserves as may hereafter be set aside under the last preceding clause as if the said agreement had been made between the parties hereto, and the provisions of the said paragraphs shall likewise apply to the lands included in the reserves heretofore selected and surveyed, except that neither the said lands nor the proceeds of the disposition thereof shall in any circumstances become administrable by or be paid to the province."

Each Agreement contained also a provision with respect to the right of Indians to hunt, trap and fish for food in all seasons of the year, which is quoted in the section of this report dealing with the hunting and fishing Indians.

FARMING AND STOCKRAISING AMONG THE INDIANS OF THE PRAIRIE PROVINCES

Farming

The Indian farmers of Manitoba, Saskatchewan and Alberta shared the vicissitudes of the season of 1929 with their white neighbours, and their fortunes varied locally with climatic conditions. On the whole their crops are considerably better than was at first expected.

The spring of 1929 opened up somewhat late and wheat seeding continued well into May. The area under crop this year consisted of the following:—

Wheat	37,059 acres
Oats	23,160 "
Barley	6,510 "
Rye	2,378 "

This grain went into the ground in good condition and there was every prospect for a large crop, but about the middle of July it was realized that there was great danger of an absolute crop failure owing to the fact that there

had been no rain up to that time. From that date there was practically no rain throughout the whole of the province of Saskatchewan, very little in Manitoba and only a few scattered showers in southern Alberta. As a result the crop at most points was very light and in some places not more than a third was harvested. However, on the Blood reserve approximately 140,000 bushels of grain and on the Peigan approximately 30,000 bushels was harvested. On the Blackfoot reserve, where the Indians had 5,680 acres in wheat, a severe loss was suffered through hail. An area of 3,500 acres was damaged and this on top of a light crop brought the yield down to 16,519 bushels. The wheat at points graded very high, most of it being No. 1 Northern, and as the price realized was good these Indians are most fortunate. In the northern part of Alberta there was little rainfall, and as a result the crops were light, averaging less than ten bushels to the acre at Hobbema, Edmonton, Onion Lake and other points. However, the prices even here helped to make up for the loss in quantity. In northern Saskatchewan, in fact throughout practically the whole of the province, the wheat crop was very light, perhaps one-third of an average crop, but here also the price will make up to some extent for the small yield. In Manitoba the wheat crop would average from eight to ten bushels to the acre. The grades there were also good. Although there was no rain throughout the whole summer the Indians did much summer-fallowing. The exact figures are not available at the time of writing, but the estimate is placed in the neighbourhood of thirty thousand acres. It is believed that had this season been a favourable one the Indians would have had a splendid crop, as the preparation made for it was excellent. The Indians broke a large acreage of land this year. Owing to the extreme drought the hay crop at many points in the three provinces was quite light, and for a time it was feared that it would be necessary to sell a great number of head of stock in order to save them. However, as the season advanced it was found that there was more hay than was expected, and this hay, together with what straw the Indians have, which has all been carefully stacked, should carry them through the winter.

Stockraising

The cattle situation on all reserves in the three provinces is most satisfactory and while the season was dry there was sufficient pasture to put them in good condition for the winter. The Indians have sold cattle to the value of $140,117.64. When there is taken into consideration the large number of cattle that was sold, as well as the cattle that have been, and will be consumed, the cattle industry among the Indians would appear to be in a very flourishing condition. The high reputation which the Indian cattle have established in previous years on the Winnipeg market is being maintained. Last spring the department bought about sixty head of purebred bulls which have been distributed to the various points where they were required throughout the three prairie provinces.

The Indians on the reserves where farming is carried on have improved the quality of their horses, many of them now being of a heavier type, and they are being better cared for than formerly. The department has purchased with band funds over 200 head of horses, which has put the Indians in a better position to carry on their farming activities. The horses purchased were of a good working type, weighing from 1,300 to 1,400 pounds.

As the years pass, an increased number of Indians are milking cows and making butter, also keeping hens. The improvement in this respect has been particularly marked this year and last.

During the past two years 689 new Indian dwellings have been built. These houses are of a much better type than those in which the Indians lived in the past. A great many of them are built from logs brought in either from

British Columbia or northern Manitoba. They have four and five windows, one or two doors and many of them are on cement foundations. They all have shingled roofs, are plastered with lime and sand and make very comfortable homes for the Indians. It is also gratifying to report that during the past year 143 barns have been built. Many of these are excellent buildings with shingled roofs, and quite up-to-date.

A large number of farm implements have been bought for various bands throughout the Prairie Provinces and there is still a demand for a further supply. Of course, many of the Indians buy their own implements but there is always a large number of school graduates and other young Indians who require assistance from the department.

INDIAN HEALTH SUPERVISION

The report for the year ending March 31, 1928, contained a general outline of the health activities of the department. In this report it is proposed to go into somewhat greater detail so as to show what is being done in various parts of the country.

The chart which forms a part of the report shows the parliamentary appropriations for health work in each subdivision of the country, and the personnel employed. The hospitals enumerated in column 6 include thirteen institutions maintained by the missionary societies of Canadian churches, or by local hospital boards. These hospitals while not under the administration of the department, are in some cases entirely and in all instances largely operated for the benefit of Indians. The number of hospitals which the department owns and entirely administers is seven. Of these, the new hospital at the Blood Indian Reserve in southern Alberta deserves special mention. Many years ago a hospital was opened at this reserve by a religious order. The institution grew and the buildings were enlarged from time to time, but at last it was apparent that they had outlived their usefulness and were beyond repair. A new brick building was completed during the past year and was opened in the spring. In construction and equipment it is considered to be the equal of any hospital of similar size in the country. It has a capacity of thirty-six beds, with special accommodation for maternity, contagious and tuberculous cases, and is an important addition to the facilities of the department.

The doctors shown in the chart are mostly physicians living in the neighbourhood of Indian reserves, and employed on a part-time basis for Indian work. Included in the number, however, are twelve doctors employed on full-time work, of whom four combine the duties of Indian agent and medical attendant.

Subdivision	Appropriation	Personnel Employed			Departmental Hospitals
		Doctors	Nurses	Field Matrons and Dispensers	
Nova Scotia	25 000 00	42	1		
New Brunswick	11 700 00	19	2		1
Prince Edward Island	1 850 00	4			
Ontario and Quebec	79 057 00	95	3		4
Manitoba, Saskatchewan, Alberta and Northwest Territories	290 560 00	97	14	26 matrons 49 dispensers. .	10
British Columbia	157 480 00	62	6	15 matrons	5
Yukon	15 000 00	2			
General Tuberculosis	50 000 00				
Suppression of Epidemics	10 000 00				
Totals	$640 647 00	321	26	41 matrons 50 dispensers	20

Epidemics

The department has had to contend with two major outbreaks of communicable disease during the year. The early part of the year was remarkably free from epidemics, but in November smallpox was reported at Caughnawaga, a few miles outside the city of Montreal. There are about 2,500 Indians at this point, and they mostly live in one large village. The outbreak had gained some headway before the diagnosis was established. Isolation hospitals were opened, and the whole population vaccinated at once. The epidemic virtually ceased on the fourteenth day after vaccination was completed, but the infection had been so widely spread that eighty-three cases required isolation and treatment. The department takes no little pride in the fact that the disease did not spread off the reserve and wishes to gratefully acknowledge the help tendered by the Directress of the Sacred Heart Hospital, Caughnawaga, in supplying personnel and direction for the isolation hospitals. The district medical officers of health of the province of Quebec also rendered very valuable assistance. The Indians co-operated splendidly by obeying quarantine orders and by submitting to vaccination. This epidemic is discussed at some length as an example of the policy and practice of the department in regard to communicable disease. It is sometimes stated that Indians will not submit to public health regulations. It would be difficult to find a white community which would be willing to co-operate with authority more thoroughly than did these Indians. Only one death occurred among those suffering from smallpox, and that one was probably only hastened by the disease, as the patient was a chronic sufferer from another complaint.

Following this epidemic a thorough going campaign of vaccination of Indians was instituted throughout the Dominion, and the Indian population has been largely revaccinated.

During the winter the Indians, in common with the white people, suffered extensively from influenza. On the more settled reserves the epidemic was not of remarkable severity, but in the northern forests where hunting Indians scatter into widely isolated groups of a few families the disease appeared to attain greater virulence. All means of transportation were employed, including the aeroplane, for carrying doctors and food supplies, but it is extremely difficult to render effective help to such a scattered population. Fortunately the actual number of Indians involved was comparatively small. This situation recurs from time to time, and always presents a difficult problem to the department, which, with the best will possible, finds it virtually impossible to reach settlements of Indians in the forest, where the distances from camp to camp may easily consume two or three days travel.

There was an outbreak of whooping cough at a small reserve on Lake Winnipeg. Primitive Indians are ill-equipped to resist this disease, the treatment of which is more a matter of nursing and good surroundings than of medical treatment. The medical attendant, in company with the Indian agent, drove an automobile across lake Winnipeg in the depth of winter to visit the reserve, and a doctor from a local lumber camp gave some attendance.

Minor outbreaks of contagious disease occurred in other places, but were promptly checked by vigorous action carried out by local officials.

Tuberculosis

The department does not maintain sanatoria for the treatment of tuberculosis, but is able, in most provinces, to utilize the institutions engaged in this service. Advantage is taken of this privilege up to the limit of available funds for maintenance of patients. Many tuberculous Indians are also accommodated in local hospitals. Special food, particularly milk, is issued to patients who either cannot be accommodated in sanatoria, or who will not take advantage of the opportunity to go there. This service was maintained and extended

throughout the year under review, and will be further extended in the succeeding year, with the increased funds available.

This report may be concluded by a brief account of the extension work in the different administrative subdivisions of the country.

British Columbia

The department gave substantial assistance in the construction by the provincial Government of a new hospital at Bella Coola, a work made necessary not only by the outworn condition of the old hospital, but by the changing of the course of the river, and the consequent flooding of the hospital and town sites. A revision of physicians' salaries was made, and opportunities taken for co-operation with the provincial Government and the Victorian Order of Nurses in establishing district public health nurses. Increased interest on the part of all connected with medical work was manifested by a demand for treatment on the part of the Indians which taxed the funds provided for this province to the utmost, even with the assistance of that part of the special grant of $100,000 which was set aside for medical purposes.

Manitoba, Saskatchewan, Alberta and the Northwest Territories

The building of the new Blood Reserve Hospital has already been referred to. A few further indications of progress may be noted. At the Stoney reserve, west of Calgary, infant mortality had been so serious as to threaten the future of the band. A nurse was stationed there in 1927, and a definite improvement is already apparent. Out of thirty-two children born in the succeeding year, twenty-eight survived their first twelve months of life, which is a reversal of the previous state of affairs. Very satisfactory reports are being received from the Sarcee reserve, where the appointment of a business-like doctor as Indian agent in 1921 has given splendid results.

Changes in medical personnel at the Blackfoot reserve presented an opportunity for the appointment of a woman physician. This was in the nature of an experiment, but the results have been most encouraging. The Indian women and children are taking advantage of her services much more freely than they did of those of the very capable male physician who formerly gave attendance. The outcome of this innovation is being watched with great interest.

The condition of the northern hunting Indians cannot be said to be improving. The tide of wild life has been at its lowest ebb during this year, and the competition of white trappers is growing continually more serious. Influenza has taken a severe toll in some localities. The health of these people, not to say their very existence, depends upon the maintenance of an adequate food supply, and the outlook is not encouraging.

Ontario and Quebec

The new Lady Willingdon Hospital at the Six Nations reserve near Brantford has been filled to capacity throughout the year. It will probably be necessary in the near future to secure additional accommodation for patients by erecting a nurses' residence. The Indians of northern Ontario suffered widely from influenza during the winter, but largely escaped smallpox which was widely although not intensively prevalent. An outbreak of scarlet fever among the white population at one point scarcely at all affected the Indians resident there owing to prompt inoculation by the local doctor.

In northern Quebec the department, for the third successive year, maintained a medical patrol along the Transcontinental railway. The Indians of this region are more than usually primitive and nomadic. The doctor who carries out the patrol has been able to teach them much, and has vaccinated almost the entire

population against smallpox. The services of a public health nurse, newly stationed at a point in the gulf of St. Lawrence were taken advantage of for the local Indian population, by the kindness of the Government of the province of Quebec.

Among the Indians of the southern parts of Ontario and Quebec, tuberculosis, while still prevalent, is no longer a menace to the survival of the race. The hunting Indians of the northern parts of these provinces, however, are much afflicted by this disease, and furnish many candidates for sanatorium treatment. It is possible that the department may be compelled to provide one or more sanatoria for Indians alone.

Maritime Provinces

The Maritime Indians present the department with a special problem. They are relatively few in number, but are scattered in small groups on small reserves which do not offer much opportunity for agriculture. Unemployment is very common and in consequence they are poor, and tuberculosis is prevalent. The department maintains a travelling public health nurse in Nova Scotia and is planning to place another in New Brunswick. The local sanatoria have been very kind in accepting Indian patients. Much extra food and relief is being distributed, and it is hoped that the situation will improve. At one point where conditions of housing and overcrowding are particularly bad, arrangements are being made to move the whole community to a new location, with greatly increased acreage and to build new houses.

It may not be out of place to refer briefly to the activities of the medical branch of the department at Ottawa. The Director of Medical Services was appointed in 1927, and much of his time has been occupied in surveying the problem in the field and at headquarters. It has been found possible to place the system of dealing with doctors and hospitals on a somewhat more regular basis and to bring into operation a standard schedule of fees paid for doctors' services. The supply of drugs for use by dispensers on reserves has been systematized. Economies have been effected in some respects, but the policy of the department is rather to extend the service than to reduce the cost. The most important and far-reaching accomplishment has been that of devising a Public Health Regulation which clearly defines the responsibilities and powers of Indian agents and departmental physicians in dealing with outbreaks of communicable disease, and gives definite instructions for prompt action. This regulation may be stated to have the effect of applying to Indian reserves the public health regulations of the province in which the reserve is situated. The Indian agent is responsible directly to the department for this duty and acts under the advice of the reserve physician. Application of this regulation has had the effect of checking several outbreaks before they had a chance to get headway without the necessity of reference to superior authority. A close study is being made of the provincial systems of public health nursing, and it is hoped that within the near future, the department will be able to report definite progress in this field which is considered to present great possibilities for improvement of health conditions.

The activities of the year cannot fairly be judged by the visible results. Forces are being gathered and plans laid which, with the increased funds available for the succeeding year, should enable the department to report a very considerable degree of progress in 1929.

LANDS AND TIMBER

Lands

During the fiscal year ending March 31, 1929, the sales of Indian lands and the collections of payments on account of previous sales continued the very decided improvement noted during the previous year. The cause of this remained the same; that is, satisfactory crop conditions in the three western

provinces, where the greater proportion of surrendered Indian lands sold for agricultural purposes are located.

During the year new lands sales in area amounted to 19,740·41 acres, realizing $204,387.79. This is a considerable increase over the previous year during which 11,480·35 acres were sold at a price of $113,956.70. The increase in sales was due principally to the fact that during the year three auction sales were held and at which about 10,000 acres were sold. A portion of the Little Black Bear reserve, in the province of Saskatchewan, containing 4,636 acres, was sold by auction realizing $55,522. In like manner, 4,658 acres of the Michel reserve, in the province of Alberta, were sold realizing $65,233. In addition to these two sales the unsold portion of the townsite of The Pas was offered for sale by public auction and a considerable number of lots sold realizing $37,155.

Collections from sales of surrendered lands in the Blackfoot reserve at Gleichen, Alta., continued most satisfactory, the department receiving during the year on account the sum of $205,282.40. Of this amount $138,434.50 was received from crop share leases. Collections in connection with most of the other sales were also satisfactory.

Petroleum and Natural Gas

During the year there was considerable interest in prospective petroleum and natural gas development on three of the larger reserves in Western Canada; namely, the Blood, Stony and Sarcee reserves, all in the province of Alberta. The discovery of petroleum and natural gas in commercial quantities in the Turner Valley has resulted in the focusing of considerable attention on these three reserves as geologists and practical oil men contend they are located within the same oil belt which runs in a northerly direction from northern Montana and up through the Turner Valley district. A number of leases have been issued by the department on the Stony Indian reserve at Morley and from present indications there is likely to be a similar activity on both the Blood and Sarcee reserves. For the purpose of dealing with this new phase of Indian administration departmental Petroleum and Natural Gas Regulations have been drafted and approved by Order of His Excellency the Governor General in Council and dated respectively the 7th day of February, 1927, and the 12th day of March, 1929.

Leases

Under the provisions of section 11 of the Regulations for the Disposal of Indian lands leases were issued to white men at the request of Indian locatees to the number of 149, and on March 31 last there were 1,332 leases current. This is an increase of 79 over the previous fiscal year.

Location Tickets

Location tickets, granting title under the provisions of the Indian Act, to individual owners for lands on the reserves were issued during the past year to the number of 106, and on March 31 last there were current 2,851 location tickets, an increase of 247 over the previous year.

Enfranchisement

Under the provisions of section 114 of the Indian Act (formerly section 122A) there were enfranchised during the past fiscal year 20 Indians, heads of families, comprising a total of men, women and children of 63. This is a decrease of 16 heads of families as compared with the previous year.

Land Patents

During the fiscal year 1928-29 there were issued 446 patents to Indian lands purchased and paid for in full. This was an increase of 212 over previous year.

Timber

The quantity of timber cut for sale from Indian reserves in the Dominion during the 1928-29 season was about the same as last season. The slight decrease in the quantity of softwoods was more than made up by a corresponding increase in hardwood varieties.

The kinds and quantities cut were as follows:—

Pine (white)	319,726	f.b.m.
Pine (red or Norway)	206,870	"
Pine (yellow or bull)	144,744	"
Pine (jack or banksian)	2 062,940	"
Spruce (various)	6 154,334	"
Hemlock (western)	3 847,645	"
Hemlock (eastern)	1 844,320	"
Cedar (red)	842,372	"
Cedar (white)	334,346	"
Fir	3 456,376	"
Balsam	1 539,023	"
Tamarac	1,407	"
Maple	2 546,659	"
Birch	1 304,243	"
Beech	261,429	"
Ash	8,893	"
Elm	58,970	"
Oak	56,175	"
Basswood	475,230	"
Poplar	108,090	"
Cottonwood	163,200	"
Cordwood (mixed)	5,664	cords
Pulpwood	34,267	"
Shingle Bolts	79	"
Ties	21,640	
Poles	2,305	
Posts	5,636	
Piling	47,378	lin. ft.

The total quantity of timber cut for sale, in terms of board measure feet was approximately forty-seven million, and in addition to this, the Indians cut approximately nine million f.b.m. for building, fencing and fuel.

Sales of timber during the year were:—

Mattagami Reserve, Ont.	Deposit	$2,000
Harwood Island, B.C.	"	1,500
Cash receipts were as follows:—		
Licence dues and royalties		$ 60,058 18
Permit dues		20,061 82
Rentals and fees		1,155 50
Deposits		3,500 00
Payments on account		77,258 85
Trespass dues		618 29
Sand and gravel royalties		1,958 74
Total		$ 173,611 38

There were 23 timber licences current on April 30, 1929, being 3 less than the previous year, 2 having terminated, 1 cancelled, 1 relinquished and 2 new ones having been issued.

Very little fire damage to timber was sustained during the year, the usual ranger patrol having been maintained, and plentiful rains having fallen during the hazardous periods of spring and fall.

Estimates of timber and reports on land were made of five reserves during the usual administrative work, and this data has been added to the record of the timber resources of the Indians.

EDUCATION

During the year, 78 residential schools and 263 day schools were in operation, a total of 341 centres for Indian educational activity. The total enrolment was 15,347 and the average attendance, 11,258. Ten years ago, there were a total of 322 Indian schools. Although the number of schools has shown but a normal increase, larger appropriations by Parliament since the War have enabled the department to enlarge as well as reconstruct buildings and to supply better and more varied equipment. Higher salaries and grants have attracted better qualified teachers and instructors. It may be said, therefore, that larger appropriations have resulted in larger and better schools. Further, Indian communities have evinced more interest in their children's welfare. The following table shows the rapid increase in enrolment and attendance:—

Fiscal year	Residential Schools		Day Schools		Total		
	Enrolment	Average attendance	Enrolment	Average attendance	Enrolment	Average attendance	Percentage of attendance
1918-19	4,640	4,014	7,312	3,587	11,952	7,601	63·59
1919-20	4,719	4,133	7,477	3,516	12,196	7,649	62·71
1920-21	4,783	4,143	7,775	3,931	12,558	8,074	64·29
1921-22	5,031	4,360	7,990	4,308	13,021	8,668	66·56
1922-23	5,347	4,695	8,376	4,411	13,723	9,106	66·35
1923-24	5,673	4,856	8,199	4,332	13,872	9,188	66·23
1924-25	6,031	5,278	8,191	4,601	14,222	9,879	69·46
1925-26	6,327	5,658	8,455	4,940	14,782	10,598	71·69
1926-27	6,641	5,881	8,069	4,660	14,710	10,541	71·66
1927-28	6,795	6,043	8,223	4,823	15,018	10,866	72·35
1928-29	7,075	6,282	8,272	4,976	15,347	11,258	73·35

In ten years, enrolment has increased 28 per cent and attendance, 48 per cent. The percentage of attendance has increased approximately 10 per cent. Not only are more children attending, but they are attending more regularly. This has had an interesting effect on the academic standing of pupils. In 1918-19, 878 Indian children were studying in grade 5 and higher. Last year, 2,228 were in the higher grades.

All this is very gratifying, but there is much to be desired yet as far as day school attendance is concerned. Every energy is being bent to make instruction at these schools attractive. Better qualified teachers, more interesting texts and teachers' aids, more playground and outdoor activities and better correlation with the Indian home environment are the aims. In Part II of this report will be found a tabular statement, showing the location and indicating the enrolment at all Indian schools.

Compared with the previous year, there was an increase of one residential school. New institutions were opened at St. Philips, Sask., and Sioux Lookout, Ont. The first is under the management of the Oblate Fathers and the second is conducted by the Missionary Society of the Church of England. The Old Sun School, in Alberta, was destroyed by fire and at the time of this writing is being rebuilt. During the year three day schools were closed on account of poor attendance, and in three communities the department is associated with a local school district in the conduct of new combined Indian and public schools.

The work at residential schools was particularly encouraging. The churches that are associated with the department in the conduct of these institutions have been more careful in the selection of principals and other officers. As before, vocational training has been emphasized. Special funds are now available for this phase of the work in the province of British Columbia and all residential schools there are now well equipped for manual training and related instruction. In Ontario and the Prairie Provinces emphasis is placed on farming, gardening and the care of stock. Seven thousand and seventy-five pupils were enrolled at residential schools during the year. Compare this with 4,640

the number maintained and trained in boarding schools ten years ago, and the increasing importance of this part of the Deaprtment's educational program is apparent.

The co-operation of the churches in the management of these residential schools was as follows:—

Roman Catholic	43	residential	schools
Church of England	20	"	"
United Church	13	"	"
Presbyterian Church	2	"	"
Total	78	"	"

All Indian schools were inspected frequently by officers of the department. In addition, public and separate school inspectors visited all classrooms, except in the provinces of New Brunswick and British Columbia, where there were special Indian school inspectors. More thorough inspection has resulted in a higher standard of instruction. Classroom activity in Indian schools is now comparable to the work in white schools of the same localities. It is the practice at Indian schools to follow provincial curricula and to engage fully qualified teachers.

The health of Indian children studying in boarding schools has been given special attention. Medical and dental supervision and treatment have been arranged. Travelling nurses spent part of their time at these institutions. There was considerable expenditure for the removal of adenoids and diseased tonsils and for the correction of defective vision. There has been a special effort during the year to vaccinate every Indian school pupil. Improvements have been made in the children's diet and in the playground activities. Milk herds have been tested and careful attention has been given to water supply and sewage disposal systems.

New main buildings were commenced during the year at the Cecilia Jeffrey Residential School, near Kenora, Ont., and at the Alert Bay Institution, in British Columbia. In addition, the department secured a suitable farm and building site and commenced the erection of the necessary buildings for a large boarding school at Shubenacadie, N.S. This last named institution will provide an academic and vocational training as well as maintenance for orphans and other neglected Indian children in the Maritime Provinces. The boys' wing at the Kamloops Indian Residential School, in British Columbia, was completed during the year. At nine day schools, new classrooms or teacher's residences were erected.

One hundred and forty-five graduates of Indian schools, who showed academic promise, received grants for the purpose of continuing their studies at high schools, universities and business colleges. The policy is to make grants to the most promising, physically fit graduates of our own schools. If church and department representatives consider a graduate worthy a grant is allowed when the bona fide intention of the pupil is evident and provided proper supervision can be secured for the period of advanced study. These tuition grants are continued only when satisfactory reports are received. Last year, besides those taking advanced work, there were approximately 225 Indian children attending white schools and orphanages. All these are in addition to the enrolment at Indian schools as shown in the tabular statements. The expenditure from parliamentary appropriation on behalf of these special students amounted to $39,000 during the year. The practice of assisting selected ex-pupils of residential schools to start farming and housekeeping has been continued.

In the past, the funds of certain Indian bands have been used to meet some of the costs of conducting day schools on their reserves. The year under review is the first that all expenditure for education has been provided by parliamentary appropriation. The program of free education is now extended to all Indians in Canada. The expenditure for Indian education for the fiscal year ended March 31, 1929, amounted to $2,215,411.98, as follows:—

EXPENDITURE FOR YEAR 1928-29—INDIAN EDUCATION VOTE

—	Day schools	Residential schools	Ex-pupils	Special salaries and travel	Tuition	Freight, express, etc.	Stationery	Miscellaneous	Total
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Nova Scotia	12,806 25	130,465 46	.....	.....	16,756 27	.....	403 55	.....	160,431 53
Prince Edward Island	1,161 03	.....	.....	.....	.....	.....	61 02	.....	1,222 05
New Brunswick	18,538 09	.....	.....	1,085 93	1,052 45	.....	723 94	.....	21,371 25
Quebec	80,239 70	.....	.....	.....	4,061 70	0 87	1,836 77	.....	86,139 04
Ontario	118,805 90	313,289 94	.....	34 90	13,888 08	276 39	8,470 57	509 56	455,275 34
Manitoba	67,614 29	202,767 77	42 50	.....	320 00	1,184 99	5,248 93	3,551 01	280,729 49
Saskatchewan	45,159 97	318,045 28	607 70	.....	1,245 00	965 93	6,673 02	2,326 98	375,023 88
Alberta	837 52	245,594 02	960 00	.....	76 00	691 95	4,770 37	570 60	253,500 46
Northwest Territories	1,933 00	30,036 38	.....	.....	.....	365 82	261 58	.....	32,596 78
British Columbia	59,877 22	454,440 67	484 08	3,556 69	1,672 09	201 64	7,256 06	.....	527,517 61
Yukon	2,733 65	18,625 47	.....	.....	.....	110 79	134 64	.....	21,604 55
	409,706 62	1,713,264 99	2,094 28	4,677 52	39,071 59	3,798 38	35,840 45	6,958 15	2,215,411 98

REPORT OF COMMISSIONERS RE ADHESION TO TREATY No. 9, FOR THE YEAR 1929.

To the Honourable

The Superintendent General of Indian Affairs,

Ottawa, Canada.

The undersigned commissioners appointed under and by virtue of a commission dated the 30th day of May, 1929, in accordance with a minute of a meeting of the Committee of the Privy Council approved by His Excellency, the Governor General, on the same date, copy of which minute is attached hereto, to negotiate with the Ojibway and other Indians in northern Ontario, an extension of James Bay Treaty No. 9, respectfully submit the following report:—

James Bay Treaty No. 9 was negotiated in 1905 with the Ojibway, Cree and other Indians inhabiting a certain tract of land comprising some ninety thousand square miles more or less in the province of Ontario, described as bounded on the south by the height of land and the northern limits of the territory ceded by the Robinson-Superior Treaty of 1850, and the Robinson-Huron Treaty of 1850; on the west by a part of the eastern boundary of the territory ceded by the Northwest Angle Treaty No. 3, and on the east and north by the boundaries of the said province as then defined by law. At this time the northerly boundary of the province was the great Albany river running several hundred miles in a somewhat irregular though constantly easterly direction from lake St. Joseph on the west at the Northwest Angle Treaty boundary to James bay. The area immediately north of the said river was at that time comprised within the limits of the northwest Territories and under the jurisdiction of the federal government.

Under Treaty No. 9 not only did the Indians within the said area south of the Albany cede, release and surrender their rights but those resident in the area lying north of the river (to a straight line AB roughly drawn from the Northeast Angle of Treaty No. 3 in a north-easterly direction to a point on James bay approximately midway between the mouth of the Attawapiscat river on James bay and that of Winisk river on Hudson bay, did likewise.

In the year 1912 the limits of the province of Ontario were extended (see Statutes of Canada, Chapter 40-2 George V, and Statutes of Ontario, Chapter 3, 2 George V), beyond the Albany river to the province of Manitoba on the west Hudson bay on the north, and the northwestern shore of James Bay on the east, now known as the Patricia portion of the district of Kenora.

Under Treaty No. 9 certain reserves were set aside to the extent of a square mile for every family of five and certain of these reserves lie north of the Albany (now within but in 1905 without the limits of the province) viz.: north part of Osnaburgh, Fort Hope, Marten Falls, and Fort Albany.

While the province of Ontario since 1912 has recognized the extinguishment of the rights of the Indians who were attached to the bands making cession in 1905 of the territory lying South of the line AB and north of the Albany to the extent of annually paying the federal Government the $4 per capita treaty money, no approval by Lieutenant Governor in Council, as is required, has been given to the said reserves.

In view of the foregoing circumstances and the fact that the pushing back of the frontier is inevitable due to the spectacular interest and activity in the

mining industry with its concomitant development, it was found necessary to extinguish the rights of those Indians resident north of the line AB; deemed advisable to confirm the cession made in 1905, by those Indians in the territory between line AB and the Albany river, and to deal with the above mentioned reserves within such area.

The program having been mapped out by the Indian Department it was decided with the consent of the Indians that they should be admitted to Treaty under the same conditions as applied to those covered by Treaty No. 9, and hence steps were taken towards effecting an adhesion thereto.

Three special points were selected at which all the Indians should assemble for consideration of the question, viz.: Trout Lake, the mouth of the Severn river on Hudson bay, and the mouth of the Winisk river on Hudson bay.

Consideration by the commissioners was to be given to the claims of the Attawapiscat Indians for a separate reserve in addition to the one already at Albany, the boundaries of which might be modified in the discretion of the commissioners to accord with any recognized claims of the Attawapiscat Indians.

Because of the magnitude of the area involved and the lack of ready transportation facilities, except flying boats, it was decided to take the air route. As it was found impossible owing to insufficient gas caches on Hudson bay at the points named, and an inability to provide such in due time for 1929 summer flying, the program provided Trout lake as the only point at which adhesion should be signed this year and that at the other reserves, like English river, those on the Albany already mentioned, and those on James bay, viz.: Moose Factory, Fort Albany and Attawapiscat, the regular annual treaty money be paid, Commissioner H. N. Awrey, representing the Indian Department as Paymaster, and Commissioner Cain, representing Ontario, on making observations at the old treaty payment points.

The program further provided that visitation to the two points on the Hudson bay be deferred until the summer of 1930 and that in the meantime steps be taken to transport the necessary gasoline supplies.

In pursuance of a joint understanding between the Dominion and the province two planes were requisitioned, one provided by the former and one by the latter. The Royal Canadian Air Force, through the Department of National Defence, after some unexpected incidents, supplied a cabin plane, a new 71 Fairchild WX, with wasp engine. Ontario, through the Department of Lands and Forests, supplied a Baby Moth, O.A.C.

The Moth, with Commissioner Cain and pilot Capt. Roy Maxwell, hopped off from Toronto Harbour at midday, June 25, the inclement weather preventing an early morning start, for Remi Lake, this being an air base of the Ontario flying service situated six miles north of the Transcontinental railway and forty miles west of Cochrane, where both planes were to meet.

The Fairchild with Commissioner H. N. Awrey, George Rutherford, Movie Picture Camera Operator of the province, Pilot Kinglsey Rose and his mechanic, one Shaw, left Ottawa on the morning of June 26. Both planes met at Remi Lake according to schedule and here the Fairchild picked up Dr. G. W. Bell, of Sioux Lookout, representing the Indian Department. On June 27 the planes were thoroughly gone over and on the following day they left for English River post, and apart from the Fairchild, which left several hours earlier than the Moth, running into a dense fog and being required to return a portion of the distance and take refuge in a safe lake until improved visibility came, the planes reached English River post without untoward incident, a distance of 123 miles, on the evening of June 28.

This place was termed in the commissioner's report of 1905 "a desolate post of the Hudson Bay Company." Conditions hove not materially changed

since then; the Hudson Bay Company while still there have as competitors the younger trading company Révillion Frères, who are erecting a new residence (rather a pretentious structure) for their factor.

Commissioner Awrey as paymaster, in the presence of Commissioner Cain, paid treaty money to some 99 individuals, over twice the number that presented themselves for admission to Treaty in 1905, as then about half of them had gone to the "line" to trade.

The commissioners addressed these Indians, who were formerly members of the Albany band, emphasizing the necessity of obeying all laws and regulations respecting fishing, trapping, hunting and forest protection. Dr. Bell exhorted them to exercise care with regard to their health and in his sympathetic way gave them excellent advice in matters with regard to maintaining and improving their general welfare.

The Moth left English River on Sunday, June 30, for Osnaburgh House, with stop-over at Ogoki for half a day and at Fort Hope for a night and half day, leaving the latter point at noon on Monday, July 1, At each of these points Indians waiting for Treaty money were met. Osnaburgh was reached at 1.30 p.m., where Commissioner Awrey had landed the night previous at 7.30, his plane WX having proceeded thence to Sioux Lookout with Dr. Bell, and camera man Rutherford, the intention being to return early next morning, July 1, but due to temporary indisposition of pilot Rose did not return until Tuesday morning, July 2.

At Osnaburgh some 498 Indians were paid treaty money and during the afternoon of Dominion Day a program of sports with suitable prizes was provided. The games consisted amongst others of running, jumping and stone putting. The unfortunate absence of the movie picture operator lost an opportunity of securing some historic records of the first Dominion Day Celebration the band had ever experienced. The games were all spiritedly contested and special features such as the Baby Beauty Show, the most successful hunter, and the shot putting contest, gave the Indians decided enjoyment.

The commissioners listened to certain alleged grievances the Indians had with regard to hunting and fishing and explained fully the laws and regulations, as well as the Indians' rights and privileges. The Indians were strongly urged for their own material welfare to respect the game and fire laws and the response made by them through the interpreter and their own facial expression, and the handclapping, showed their approval. The full meaning of a Dominion Day Celebration and the significance of the Union Jack were explained to and appreciated by them. Discussion with regard to the use by the Indians of the reserve and the necessity of having that portion lying north of the Albany river duly approved was pointed out.

While treaty money was being paid and medical attention was being given, the two pilots, Rose and Maxwell, in the WX plane, in preparation for the last leg in the journey to our main objective, Trout Lake, transported gas to Lansdowne House and established an emergency cache of ten gallons at Nibinamik, or Summer Beaver Lake, about 50 miles north of Lansdowne.

On Wednesday morning, July 3, at 11.50, the moth left Osnaburgh for Lansdowne House, where a stop-over was considered wise. Lansdowne House was reached at 1.30 p.m. and Commissioner Cain spent the afternoon interviewing the trading companies' factors and making a general survey of conditions. Certain Indians, about 50 in number, of the Trout Lake Band, were encamped here for the purpose of being duly enrolled by the Commissioners on their return from Trout Lake.

The Moth left Lansdowne House at 6.25 p.m. Wednesday, July 3, and after two hours' delightful flying with the visibility the keenest up to then met on the trip, reached Trout Lake at 8.30 p.m. The companion plane WX had

not then arrived. To view from the air in an open plane such a scene as followed the Moth's arrival over the lake was a memorable sight. It was hailed by the Indians with a real delight and childish conviviality,—the usual restraint characteristic of the race having been carelessly thrown aside in a comic display of pent up energy, as they rushed pell mell to greet the "fire canoe" and its occupants.

On the following morning, July 4, in order to allay the anxiety of the Indians and their evident impatience, Commissioner Cain called together all the members of the band, some 600 in number, under arrangements with Rev, Mr. Garrett, the resident Anglican missionary, who very generously opened his church for the purpose and his house for members of the party. A personal glad hand shaking of each member of the band, even to the babies in arms, followed, all this having been preceded by a special message of the chief, a very alert and intelligent leader, that his people especially desired to welcome the representatives of the King. The commissioner, after greeting all, addressed the band as they gathered outside the church, not large enough to accommodate all, and fully explained the purpose of the visit and that their Great White King, George V, had delegated two commissioners, the other, Mr. Awrey, being on his way by the air route, to bring them peace, good cheer and happiness. They were congratulated on their manifest interest in the religious services, on their ability to sing and chant, their evident intelligence and their clean and well dressed appearance.

Plane WX with Commissioner Awrey and Dr. Bell reached Trout Lake on the evening of Thursday, July 4, the delay being due to adverse weather conditions at Osnaburgh, on account of which the load had to be reduced by leaving the mechanic and camera man at Osnaburgh, the intention being to make a second trip for them.

The arrival of Commissioner Awrey was the signal for a repetition of the acclaim accorded the earlier plane and Commissioner Awrey was given a right royal welcome. On Friday morning, July 5, Plane WX returned to Osnaburgh to get the two members of the party left behind, Captain Maxwell having arranged with Pilot Rose to bring back ten gallons of gas for the use of the Moth.

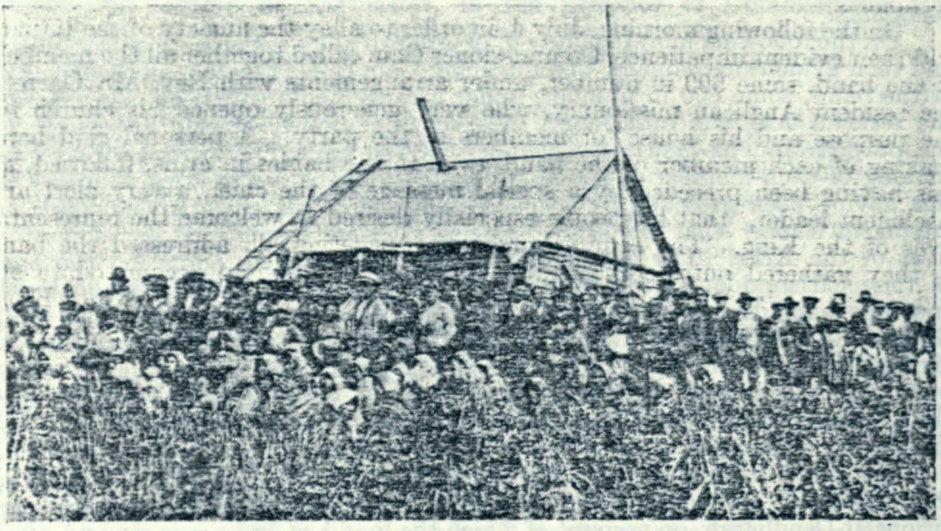
The weather being ideal the commissioners lost no time in calling the entire band together to address them on the object of the official visit. The services of one William Cromarty, a half-breed interpreter, were enlisted but his inability to raise his voice much above a whisper necessitated the words being relayed through the Chief. After fully understanding the explanations of the commissioners they were requested to remain in conference, appoint leading representatives of the band, six in number, in addition to the Chief, to meet the commissioners at the leaders' convenience and enter into full discussion of the terms and conditions of the treaty.

The commissioners withdrew and after dinner word came from the leaders that they were prepared to meet the commissioners for consideration of the treaty proposals and that they had full authority to act for the band, it having been clearly pointed out to the assembled Indians in the morning that what was agreed to by their leaders or representatives would be binding upon the whole band.

The commissioners and six leaders, Samson Beardy (Chief), George Winnapetonge, Jeremiah Sainnawap, Isaac Barkman, Jack McKay and Jacob Frog, met in a new unoccupied one-room building, "The Historical Hall", roughly constructed in the form of a 16 foot square, out of pit sawed spruce logs, over which flew a new Union Jack from a substantital pole hurriedly erected by the interested Indians.

Every important point in the treaty proposals from the area involved, which was indicated to the Indians on a roll map hanging upon the north wall of the rude strucure was carefully considered to the minutest detail. In this they evinced the keenest interest, particularly in respect of the detailed obliga-

tions of the Crown. The ground was thoroughly covered, the commissioners entering into explanations with a particularity of detail, realizing that in the past certain claims have been made that the Indians did not fully understand the meaning of their act.



"THE HISTORICAL HALL" TROUT LAKE

Cognizant of their stolid character in certain circumstances and extremely desirous that any suspicions or apprehensions should be removed, the commissioners not only invited and received many questions but prompted the Indians in seeking data on points such as fishing, hunting, trapping, mining, etc., that might hereafter arise. The questions put to the commissioners and the sustained interest manifested by these alert leaders, who as time wore on became quite talkative, justify the opinion that for general intelligence they are much more advanced than the members of bands closer to the line and the commissioners feel from the observations noted and the comparisons made that the absence of direct and regular contact with the white man has not adversely affected this Northern Band, but on the contrary has obviously kept them free from many of the evil influences that such contact has upon the red man.

During the lengthy discussion it was suggested by the leaders that they get $5 per head annuity, the same as Indians in Treaties Nos. 3 and 5. The inequality of such payment and the fact that it was beyond the powers of the Commissioners to grant it were pointed out to the leaders and understood by them. At the conclusion of the discussion each leader was asked personally if he understood everything and was wholly satisfied and each answered in the affirmative. Each leader not only expressed such satisfaction but the chief and another leader desired that it be placed on record that the leaders put absolute trust in the commissioners and that their frank treatment of all matters gave them confidence in the entire Treaty negotiations.

Consequently at 5 p.m. on Friday, July 5, 1929, the commissioners, followed by the leaders, signed the document, each leader signing his own name in Cree Syllabics. The witnesses were Rev. M. Garrett, Mrs Garrett, his wife, Dr. Bell and Karl Bayly.

The way was now open for enrolment. The same evening twenty young stalwart Indians were enrolled in advance as they had to leave early next morning by canoe for Fort Severn, 260 miles distant, to bring back supplies for the Hudson's Bay Company.

On Saturday, 9.30 a.m., E.S.T., July 6, the Commissioners started to enroll the band, it having been decided to secure if possible the ages of all. The half-breed interpreter Cromarty, while able to converse more or less freely with the Indians, all of whom were Crees, had no knowledge of spelling, and he was thereupon transferred to Dr. Bell. The commissioner substituted him by a Free Trader, a native of Newfoundland, Karl Bayly, a college graduate, who has been successfully trading in the outpost areas of Manitoba and northwest Ontario for some years. He had come from Norway House on the Nelson river in Manitoba to Trout Lake, a canoe distance of 460 miles, which was made in ten days. Through his knowledge of the Cree language and his acquaintance with a number of the Indians he very materially aided the commissioners in securing detailed information for registration.

The work of the commissioners was much expedited by the preparations made by the Indians, who had been previously instructed by the Commissioners to have in writing facts covering the names, ages and classification into men, women and children and in the case of women into widows, married or maidens. The commissioners deemed it advisable to provide for the permanent statistics the ages of all that the basis of any future study along ethnological lines, and the growth or decline of the band, would be reliable.

Practically every head of a family presented a piece of brown wrapping paper or birch bark, bearing in syllabics the desired information, which, through the splendid service of the Interpreter Bayly, was readily transcribed into English for our official records. The commissioners were thus able to enlist and pay over 525 members of the band up to 6 p.m. the first day.

On Monday, July 8, the remaining members, 52, were enrolled and paid. Other names to the number of 22 were submitted by five heads of families who claimed adherence to the Trout Lake band and had come from the region of Island Lake on the Manitoba boundary but frankly claimed residence in Manitoba, where their wives had been receiving treaty money, although the husbands spend ten or eleven months each year in Ontario, their hunting grounds. The commissioners gave them the alternative of applying to and getting permission from the Island Lake Council to enter their band, for which they expressed a preference, and seek approval thereof of the Indian Department, or appearing next year with their families at Trout Lake and satisfying the commissioners of their change of domicile to Ontario, when they would be admitted without loss of their gratuity except as to their wives, who could be entitled only to the regular annuity.

In addition to the 577 enrolled in the band at Trout Lake some 50 previously referred to were enrolled at Lansdowne House by Commissioner Awrey on the return trip some days later, Commissioner Cain having encountered these on his ingoing journey, but unable owing to illness to be present when their names were submitted. This brings up the total of the Trout Lake Band to 627 for the year 1929.

A certain number of Indians inhabiting the regions surrounding lake Wendigo and Round lake, who it was believed claimed adherence to the Trout Lake band, were duly advised by the Indian Department in January last to present themselves and families at Trout Lake for admission to treaty, but for some reason they did not appear nor have any representatives meet the commissioners and in consequence their claims were not considered. It was intimated, indirectly by other Indians, that they did not fraternize with the Trout Lake Band proper and preferred a separate band of their own with the right to select their own chief. From the scant information received at Trout Lake their numbers were calculated at about 150, and it was tentatively agreed by the commissioners at Trout Lake that in the absence of any explanation of their failure to attend it might be unfair to exclude them from the usual gratuity privileges and admission to treaty, provided next year when the Commissioners

visit Trout Lake the Indians and families appear, present their greivances and become enrolled.

Reserves.—On the assumption that the entire band would approximate 750, the number being indefinite owing to the lack of information respecting the Wendigo and Round Lake Indians, reserves were set aside for the use of the Indians on the basis of one square mile to every five persons. The chief maintained that the flat nature of the country, with its low lying lake conditions, lessens the opportunity for full development and the selection of areas in different localities would increase the chances of more successfully establishing in the future community life and making the land productive. The chief expressed the hope that some day a community system based upon that similar to the white man would be evolved for his race. The magnitude and inaccessibility of the region in question, involving such long and arduous canoe trips for all to assemble at any one given point at a specified time, was an added reason for a division of the acreage to which the band would be entitled. Consequently the Commission felt justified in allocating four different Reserves as follows:—

1. *Trout Lake.*—This was to be the largest and the central point at which treaty payments should be regularly made.

2. *Sachigo*, on the west.

3. *Wunnummin*, on the southeast.

4. *Round Lake*, or *Wendigo*, on the southwest, at such point to be hereafter established.

Chief Beardy expressed the hope that this reserve would be treated by the Wendigo and Round Lake Indians as a token of the good will he and all the Trout lakers assembled had for their absent though rather diffident Indian brothers for whom the chief had the highest regard and all of whom he considered his children.

The following is a rough description of each reserve, which shall be duly surveyed at the earliest time possible by an Ontario land surveyor, at the direction of the Dominion Government.

Reserve 1, Trout Lake, comprising roughly an area lying on the east or southeast shore of Trout lake, where it empties into the Fawn river and extending on both sides thereof along the shore of the said lake for 3½ miles more or less, and back therefrom to a distance of approximately 10 miles, always, as far as possible, at a distance of 3½ miles from the shore on each side of the main channel of the said Fawn river, containing 70 square miles more or less.

Reserve 2, Sachigo Lake, comprising an area lying at the outlet of Sachigo lake where it empties into Sachigo river, and extending on both sides thereof along the shore of the said lake for 3½ miles more or less and back therefrom to a distance of approximately ten miles, always, as far as possible, at a distance of 3½ miles from the shores on each side of the main channel of the said Sachigo river, containing 14 square miles more or less.

Reserve 3, Wunnummin Lake, comprising an area lying at the southeast end of Wunnummin lake where it empties into Winisk river, 4½ miles frontage by 6 miles in depth, the area to be largely to the south side sufficient of the north side to be included so as to cover both sides of the river, containing 27 square miles more or less.

Reserve 4, Round Lake, or in *Wendigo Lake Region*, the area to be of such size and dimensions as may be determined by the commissioners, provided the Indians of such region accept treaty and are admitted in the year of 1930, the acreage of such proposed reserve to be the difference between the aggregate acreage required to be allotted to the whole band and that covered by the first three mentioned reserves.

The commissioners deem it worthy of note that of the 627 enrolled in Trout Lake Band 43 are widows of whom some 16 are childless, the other 27 having

95 children. In other words 22 per cent of the total members of those enrolled are widows and their dependents,—a number of husbands having died last winter as the result of an apparent flue epidemic. The clean and well dressed appearance of the widows seemed to indicate their condition at the moment was satisfactory and their lot fairly happy. However, with such a proportion of dependents it is reasonable to conclude that in the not far distant future appeals for relief will be made and efforts towards meeting these will accentuate the problem of the Department of Indian Affairs in providing emergency or general relief essential in such a far flung portion of the province, so many miles back from the coast, and so remote from the ordinary lines of communication.

Trout lake, where the Adhesion was signed, is the most important reservoir of the Severn river, its main outlet to the Severn proper being the Fawn river, the distance from the lake to the mouth of the river on the Hudson bay being 260 miles by canoe travel and 175 miles by air route. The lake lies between 53½ and 54° North latitude, and 89½ and 90° West longitude. Mail reaches here but twice a year, occasionally but once a year, coming as do the supplies via York Factory or Fort Churchill, thence by schooner to the mouth of the Severn, hundreds of miles, thence by canoe route to Trout lake. Some twenty-five years ago two Indians blazed a straight compass winter dog route from Trout Lake to York Factory, 250 miles, which is now used when necessary. Transportation charges are necessarily heavy and reflected in the prices of staple commodities. Flour costs 35 cents a pound, sugar $1 a pound, tea $2.50 a pound, pork $1 a pound, salt 50 cents a pound, and shortening $1 a pound.

The Hudson Bay Company have had a post established here for many years, at present in charge of W. H. Allison, with Ernie Hampton as clerk. These comparatively young men were extremely courteous, very hospitable and most obliging and furnished very comfortable quarters for several of the Treaty party. They rendered excellent service in offering information in respect of the Indians with most of whom they regularly trade. The remaining Indians market their furs with a free trader. The Hudson Bay post is situated near the north shore of the lake, on an island, which contains a very inviting sand beach affording safe anchorage for air craft.

The Anglican community has a mission church of log construction and a nearby house where the present rector, Rev. M. Garrett, resides. Practically all the Indians of the band show adherence to the Anglican faith (although one lay Methodist Itinerant preacher was enrolled), and during the week spent there by the treaty party daily attended services and the fervour and devotion indicated by their outward demeanour, as they sang hymns and chanted psalms, along with the general tranquility of the band, are direct evidences of the christianizing influence of the mission.

In pursuance of a long and well established practice regular elections for chief and councillors were held for the newly admitted band. There was no dearth of candidates and after an animated contest the following were elected and established in office: Chief, Simon Beardy, Councillors: George Winnapetonge, Jeremiah Sainnawap and Isaac Barkman.

In accordance with the provisions of the treaty the chief was presented with a large Union Jack, the symbol of authority, and each councillor with the chief had pinned upon his person his official badge, in accordance with the provisions of the treaty.

At the conclusion of enrolment and payment the Indians expected the usual feast that accompanies such treaty negotiations, but owing to the lack of provisions at the post the looked-for formalities were abandoned. The commissioners, however, assured the band that next year if there be ample supplies in store the deferred feast would be given. Partly in substitution of such feast commissioners arranged rather an extended program of sports and the carrying out of these was indeed a new experience for the Indians. All the band evinced the greatest interest as they squatted about upon the somewhat spacious though

rather rough cleared area on the shore of the lake. The contestants enthusiastically entered into the spirit of the games and some of the younger element, those athletically inclined, gave promise of sturdy development. As a matter of official and historic record the program of the event appears below, with the prizes designated.

Event	Prize
Baby show	1st, 2nd and 3rd prize—cup each
Best looking girl	Ball
Best looking boy	Ball
Largest family	Large size frying pan
Best hunter	Trap
Oldest Indian	Tobacco
Oldest squaw	Shawl
Best pair twins	Large balls
Boys' race (50 yards) under 12	Mouth organ
Girls' race (50 yards) under 12	String of beads
Boys' race (50 yards) under 16	Pair of braces
Girls' race (50 yards) under 16	Handkerchief
Shot putting, men	Pipe
Men's race (75 yards)	1st and 2nd, hat each
Men's broad jump	Watch
Sack race	1st and 2nd, jack knives
Canoe race	1st and 2nd, watches

Monday evening, July 8, was drawing to a close when a challenge from the aborigines to the white men, limited to seven, for a test of supremacy in field agility, was issued and there being no "war weapons" in the form of gutted sticks to display the hectic value of Canada's national game, a football possessed by the well practised Indians was requisitioned and a real soccer struggle ensued. The seven whites, consisting of the two commissioners, with Dr. Bell, Captain Maxwell, Karl Bayly, the interpreter, the Hudson Bay factor and his clerk, with an average age of 36 years, forced the seven adroit red skins, with an average of 25 years, to bite the dust and after forty minutes hit and miss warfare emerged the winners by two goals to zero. The entire band urged on their followers to a frenzied effort but all in vain. Three rousing cheers for the winners and the vanquished concluded an eventful day in the lives of these new treaty Indians.

Tuesday, July 9, 1929. The commissioners having fully completed their work by noon were still anxiously waiting for plane WX which had failed to return from Osnaburgh. Several days having elapsed since it left consideration was given to a probable line of action with regard to proceeding with the Moth and arranging a search party. In the afternoon, however, a plane hove in sight which turned out to be a new machine, Fairchild XB, piloted by Flight Lieutenant Higgins, with Sergeant Green as mechanic, and brought the sad news that the WX had crashed at Osnaburgh, resulting in the loss of one life, the cook at the Hudson Bay factors' post there, Sandy Morrison, and a serious injury to Pilot Rose, and minor injuries to passenger Hooker, the Hudson bay factor at Osnaburgh. The injured were taken by plane to Sioux Lookout hospital for attendance. Plane XB had come from Ottawa following the crash, communication via Government plane to Sioux Lookout and telegraph having been employed. Pilot Higgins had no knowledge of the arrangements made between Pilots Maxwell and Rose respecting a gasoline supply for the Moth but very kindly syphoned out five gallons, as a partial relief from his machine, thus enabling the Moth to proceed to Lansdowne House in the expectation of refuelling from the 10-gallon cache at Nibinamik, or Summer Beaver Lake, some 100 miles south of Trout Lake, and about 60 miles north of Lansdowne. At 5 p.m. Tuesday, July 9, both planes took off for Lansdowne House but XB, because of a slight leak in gas tank, continued without stop to Fort Hope for the purposes of short repairs, on completion of which the same evening returned to Lansdowne House.

The Moth practically followed the same course on its outward journey from Trout Lake, as on its inward, for some distance, but bucked a fairly heavy cross wind all the time, and found its limited gas supply subject to a heavier consump-

tion than under normal conditions. It was therefore decided, to refuel at Nibinamik Lake, rather than flirt with uncertainties, but because of the similarity of the lakes, the shore lines and the islands it was difficult to pick up the cache land marked only ten days before, and a slight turn to the right rather than the left resulted in overlooking the cache and a further westward survey over a string of lakes failed to disclose its real location. Pilot Maxwell, understanding that prospectors were actively carrying on investigations in the chain of lakes and trusting to the possibility of securing gas from their operating company, proceeded westward and after landing at a small lake to await the dropping of the unfavourable wind and to investigate an old encampment which proved an abandoned Indian lodge, proceeded farther westward to select a propitious landing shore, and in due time observing a very inviting sand beach on a lake of reasonable size, landed with but sufficient gas to carry on taxiing on the lake. This lake was not shewn upon our map but lies at the western end of the chain of lakes of which Wunnummin, emptying into the Winisk River, is the most important indicated on the map.

Commissioner Cain and Pilot Maxwell were thus forced to camp in the wilds on the sand beach in the hope that a provincial air service plane would locate the position of the Moth within a day or two should one of the different commercial planes operating in this section not do so. That evening after the camp fire had been extinguished and preparations were being made for open air beds, several Indians ploughed through the deep waters and drew up their canoes alongside the Moth which had attracted their attention some miles distant. Little information could be secured from them except that they were Crees and had an encampment on the opposite side of the lake. After an unsatisfactory attempt on their part to explain their coming they hopped into their canoes promising to return the following day. About midday on Thursday, July 11, the Indians again called, this time six only in number including two new faces, and gradually the occurrence of the night before was being repeated when much to the amazement of Commissioner Cain their leader, the chief, very unceremoniously extracted from his pocket a letter written by Dr. D. C. Scott, Deputy Superintendent General of Indian Affairs, in January, 1929, directing him as Chief of the Wendigo Indians to appear at Trout Lake for treaty negotiations. These then were representatives of the very Indians whose absence from Trout Lake gave the commissioners much concern and caused considerable discussion.

The unexpected meeting of this band was a striking coincidence when related to the fortuitous landing of the Moth plane.

These Indians of the Wendigo and Round Lake regions, under a false impression that the commissioners were to treat with them separately, had established an encampment on the opposite side of the very lake whose hospitable sand shore had welcomed the Moth. It is believed they numbered around 150 to 175 since by actual count, as was afterwards learned, there were 43 canoes banked. In full expectation of meeting the Commissioners they had posted the lanes for the safe landing of the planes.

That there should be no misunderstanding hereafter Commissioner Cain wrote and presented to the chief the following letter:—

2.20 p.m. E.S.T.,
Wednesday, July 10, 1929,

Forced landing, gas low, on Inland Lake, South of Trout Lake, District of Kenora (Patricia Portion).

To the Chief of the Cree Indians,
Wendigo, Ont.

DEAR CHIEF,—On the 29th January last you were advised that the commissioners appointed to negotiate with the Indians of northern Ontario an adhesion to Treaty Nine, would be at Trout Lake on July 3, 1929, and that all the Indians residing in the vicinity of Wendigo and Trout Lake should meet at Trout Lake.

The commissioners, according to arrangement, met at Trout Lake and signed a treaty with nearly 600. You and your Wendigo Indians were not there and therefore you were not entered and cannot be enrolled this year and paid as were those who appeared there.

Now if you wish to become Treaty Indians you must next year bring all your families, women and children, to Trout Lake and you will be entered as Treaty Indians, and the commissioners, if there together, will consider any question or questions you may bring forward.

This letter is written by one of the commissioners to whom, while encamped on the sand beach of this lake, which name he does not know, though the Indians call it something like "Nikip," several Indians came after having seen our plane land to wait for gas supply when a search plane locates us. The one whom the undersigned considers "Chief" presented the letter of Dr. D. C. Scott, D.S.G., dated January 29, 1929, No. 235225-1 "A."

Our unexpected landing here and still more unexpected visit by you Indians, seven last evening, within one hour after landing and six today, including the bearer of Dr. Scott's letter, seems a striking coincidence in the train of events occurring in connection with this year's adhesion, particularly when the Commissioners were so anxious to meet the Wendigo and Round Lake Indians at Trout Lake, where the newly elected Chief, Sampson Beardy, said he had no illwill against your Indians but considered you all his children.

The undersigned is now on his way to Attawapiscat Lake or Lansdowne House and should any of your Indians meet us there we shall indeed be glad to admit you to Treaty.

Those who are not taken in this year *must* appear next year with their wives and families at Trout Lake if they wish treaty.

Very sincerely yours,

W. C. CAIN,
Commissioner.

The balance of the day was devoted to the setting out of smudges on the mainland in the hope of attracting a searching plane.

On Thursday, July 11, with the remaining gas in the tank the Moth was taxied over to an island, one mile from shore, where several smudges of goodly proportions with great difficulty were set out. The wind being in the tail on the return the Moth drifted to shore without the use of gas.

Towards evening of this day a Cabin plane of the Western Airways on transporting prospectors to a nearby lake observed the Moth and landed. Arrangements were made to bring a supply of gas the following morning to enable the Moth to proceed to Lansdowne and the remaining points of call on James bay. That night, however, a violent illness seized Commissioner Cain that forced him to take plane next morning, July 12, to Sioux Lookout Hospital, reached on the same evening after a stop for refuelling at Cat Lake. He was unable to continue the rest of the journey but as the treaty had been signed at the only point provided in the program and but fifty Trout Lake Indians were to be enrolled at Lansdowne, visited by Commissioner Cain on his inward journey, the latter requested Commissioner Awrey to list and pay them, which was duly done. Certain other questions respecting reserves at Albany and Attawapiscat, that were considered by Commissioner Awrey, were deferred until next year.

Commissioner Awrey continued the journey and while he was engaged at Lansdowne on July 10, XB returned to Trout Lake in search of the missing Moth. Several planes of the Ontario Air Service were enlisted to join in the search and the eastern route to Trout Lake was followed on July 11 and 12, until the announcement of the arrival of Commissioner Cain at Sioux Lookout hospital.

On July 11, 12 and 13, Treaty payments were made at Fort Hope, where the reserve lies north of the river, and is still subject to approval of the Ontario Government. Regular elections were held and on Monday, July 15, Commissioner Awrey returned to Lansdowne House for the enrolment of the fifty Indians covered by the request of Commissioner Cain, which reached him after his first visit to Lansdowne.

On July 16, XB plane being unable to get connections through Fort Hope radio to Ottawa, proceeded to Allanwater on the Transcontinental for instructions and on its return the party, with Dr. Mitchell of Sioux Lookout, substituting Dr. Bell according to schedule, went to Ogoki where annuities were paid. The day following, July 17, the plane proceeded to Albany arriving at 4 p.m.,

and here Commissioner Awrey, who had during the early part of the journey discussed the merits of the claims of the Indians to a modification of boundaries of the Albany reserve due to the requests of the Attawapiscat Indians for a separate band, considered it wise to defer the matter until next year.

During the work at Albany XB plane transported Rev. M. Northam, Anglican missionary of Albany, to Sudbury hospital for treatment of a serious illness and returned on Saturday, July 20, On Monday, July 22, when prepared to leave for Attawapiscat the plane was found to have a slightly damaged float and this was repaired. Unfortunately while taxiing out on the following day from shore to set out to Attawapiscat the plane struck a submerged stone and sprang a leak, Pilot Higgins was obliged to return to Ottawa for a new float. Commissioner Awrey, to expedite the business in respect of the claim of the Attawapiscat Indians, instead of waiting for the return of the plane from Ottawa, the date of which was uncertain, took canoe for Attawapiscat on Tuesday and after an unprecedentedly fast trip reached there the following night. Thursday, July 25, Friday, July 26, and Saturday, July 27, were spent in paying treaty money, holding elections dividing the Albany Band and creating a new and distinct one to be hereafter known as the Attawapiscat Band, to meet the view of the Attawapiscat Indians, and dealing with their request for a reserve of their own. A determination of this question, inasmuch as it affects the reserve already laid out, though not confirmed, at Albany, was transferred to next year when both commissioners would be present.

XB Plane having returned from Ottawa on Friday, July 26, the party set out on Sunday, July 28, for Moose Factory, which was reached at 2 p.m. Notification of the serious condition of an Indian boy at Fort George, who had been shot in the hip, and of the need of immediate aid, was received. The work of paying treaty money and making certain investigations into matters respecting fishing, by Commissioner Awrey, was finished on Tuesday, July 30, and at 3 p.m. he left for Remi Lake and arrived there at 5 p.m. Instructions were received from Ottawa to send back the plane to Fort George for the Indian boy but owing to unfavourable weather conditions the plane was delayed until Thursday, August 1. Early in the morning, 4.45, the plane left for Fort George, arriving there at 10 a.m. It left again with the injured lad at 2 p.m. the same day and in a non-stop flight proceeded to Ottawa, reaching there at 9 p.m.

Commissioner Awrey left Remi Lake on Thursday, August 1, for Ottawa, by boat and train, arriving home on Friday, August 2, thus ending a memorable trip that will go down in Indian Treaty history as one crowded with untoward incidents, where tragedy, pathos, humour and devotion to duty each played its important part.

In conclusion the commissioners desire to place themselves on record as as being of one accord on the various questions that arose and the problems presented. While differences of opinion in minor matters necessarily were expressed it is gratifying to note that the spirit of conciliation and sympathy always characteristic of the governing powers in Ontario when treating with the Indians, animated all the deliberations and the mutual respect and tolerance of the Commissioners established a common working basis. It was found that an attitude of fairness, even to the extent of leniency, and frankness towards the Indians elicited warm hearted response.

The province of Ontario, through the Department of Mines, and Department of Game and Fisheries, very graciously suggested through their minister, the Hon. Charles McCrea, that certain inquiries be instituted in respect of mining claims and the feelings of the Indians regarding fishing, trapping and hunting. Appeals for commercial rights in fishing had been declined by the Department of Game and Fisheries until the interests of the Indians could be consulted and an official expression of opinion secured. After the closest observations following intimate inquiries at every post visited, both with regard to hunting and fishing, it is the viewpoint of the commissioners that the entire area lying north of the Albany river to James bay on the east, Hudson bay

on the north, and to Manitoba and treaty areas 3 and 5 on the west, be exclusively left to the Indians so far as hunting, trapping and fishing are concerned, that they may be assured of a continuous source of natural supply for their sustenance, the Indians to be subject in every respect to the game and fishing laws and regulations of the province.

At but two points in the whole trip did the treaty party get fresh fish, lake trout at Osnaburgh on lake Joseph and at Trout lake on the Severn river, and even here it was with apparent difficulty that the Indians, aggregated for treaty and annuity purposes, secured ample catches to meet their own immediate needs. Not a single dish of sturgeon on the entire trip was served, the opinion being generally expressed that a scarcity existed this year. The Indians at different posts entertained fears lest their fishing and hunting grounds would be encroached upon by the granting of commercial fishing licences and the possible extension of trapping rights to whites. While showing gratitude for the generous treatment accorded them by the Ontario Government in limiting certain privileges to resident Indians they appealed to the commissioners for some assurance that there would be no departure from that policy and that their future means of existence would not be narrowed.

The commissioners in the circumstances respectfully, though strongly, recommend that it be suggested to the Ontario Government that before permitting commercial fishing licences, or granting extensions to whites with regard to hunting and trapping in this remote region, the matter be carefully studied and that as far as it is within the public interests the area be specifically left for the exclusive use of the Indians, the doing of which will, the commissioners believe, in no way interfere with or be antagonistic to the general fishing or hunting industry.

The commissioners further recommend as follows:—

(a) That the surrender made in the year 1905 by the Indians of that portion lying South of the line AB, then in the Northwest Territories but included in the extended boundaries of Ontario in 1912, be hereby approved and confirmed.

(b) That the following reserves situated in the area referred to in the preceding paragraph *(a)* be approved and confirmed as already allocated and duly surveyed.

1. Osnaburgh, North of the Albany River, 53 square miles.
2. Fort Hope, 100 square miles, and
3. Marten Falls, 30 square miles.

(c) That the final determination of the size of the Albany Reserve and the location and size of a Reserve to be established for the Attawapiscat Band be deferred until the year 1930.

(d) That the three reserves for the Trout Lake Indians, selected, subject to a proper survey, viz.: Trout Lake, Sachigo and Wunnummim, be approved; and that any mining claims staked out and recorded within any of these three reserves subsequent to the date of the signing of the Adhesion, July 5, 1929, be in all respects subject to the provisions of Cap. 13, 14 George V, in which the rights of the Indians under well defined conditions are protected.

The commissioners desire to direct attention to the necessity of making adequate provision, prior to the advent of cold weather, for the transportation of gas to and the establishment of caches at Attawapiscat, Winisk, Severn River, and also possibly at Trout Lake, to ensure ample supplies for next year's treaty planes.

We beg to submit herewith the original treaty signed in triplicate.

All of which is respectfully submitted by the Commissioners.

Your obedient servants,

W. C. CAIN,
H. N. AWREY.

August 30, 1929.

Adhesions have yet to be taken from the Indians at Wendigo, Fort Severn and Winisk. It is expected that this will be done during the summer of 1930.

P.C. 921

Certified to be a true copy of a Minute of a Meeting of the Committee of the Privy Council, approved by His Excellency the Governor General on the 30th May, 1929.

The Committee of the Privy Council, on the recommendation of the Superintendent General of Indian Affairs, advise—pursuant to an agreement made on the first day of March, 1929, between the Superintendent General of Indian Affairs on behalf of the Dominion of Canada, of the one part, and the Hon. William F. Finlayson, Minister of Lands and Forests of the Province of Ontario, on behalf of the Government of Ontario, of the other part—that Mr. Walter Charles Cain, Deputy Minister of Lands and Forests for the Province of Ontario, and Mr. Herbert Nathaniel Awrey, of the Department of Indian Affairs, be appointed commissioners, for the purpose of negotiating an extension of James Bay Treaty No. 9 with the Objibeway and other Indians, inhabitants of the territory within the limits hereinafter defined and described, by their chiefs and headmen, for the purpose of opening for settlement, immigration, trade, travel, mining and lumbering, and for such other purposes as to His Majesty may seem meet, a tract of country bounded and described as hereinafter mentioned, and of obtaining the consent thereto of His Indian subjects inhabiting the said tract, and of arranging with them for the cession of the Indian rights, titles and privileges to be ceded, released, surrendered and yielded up to His Majesty the King, and His successors for ever, so that there may be peace and good-will between them and His Majesty's other subjects, and that His Indian people may know and be assured of what allowances they are to count upon and receive from His Majesty's bounty and benevolence, which said territory may be described and defined as follows, that is to say:—

> All that tract of land and land covered by water in the province of Ontario, comprising part of the District of Kenora (Patricia portion), containing one hundred and twenty-eight thousand three hundred and twenty square miles, more or less, being bounded on the south by the northerly limit of Treaty Nine; on the west by the easterly limits of Treaties Three and Five, and the boundary between the provinces of Ontario and Manitoba; on the north by the waters of Hudson bay, and on the east by the waters of James bay, and including all islands, islets and rocks, waters and land covered by water within the said limits;

the said treaty to release and surrender also all Indian rights and privileges whatsoever of the said Indians to all or any other lands wherever situated in Ontario, Quebec, Manitoba or the District of Keewatin, or, in any other portion of the Dominion of Canada.

The committee, on the same recommendation, further advise that the said Mr. Walter Charles Cain and Mr. Herbert Nathaniel Awrey be paid as commissioners for the purpose aforesaid, the sum of thirty-five dollars and fifteen dollars per diem respectively, together with reasonable travelling expenses.

G. G. KEZAR,
Assistant Clerk of the Privy Council.

BUILDINGS

The following are the buildings erected during the fiscal year 1928-29.

The Onion Lake R.C. Indian Residential School has been completed and is now occupied.

Indian Residential Schools have been constructed at Shubenacadie, N.S., Cecilia Jeffrey's at Kenora and the Boys' Wing built for the Kamloops Indian Residential School, Kamloops, B.C.

Work has commenced on the new Alert Bay Indian Residential School.

Outbuildings have been provided and improvements made at several of the Residential Schools.

Day Schools have been built at Caughnawaga, Broken Head, Peguis Centre, Little Red River and Thunderchilds.

A modern up-to-date hospital has been erected for the Indians of the Blood reserve. The hospital is located in the town of Cardston.

BRIDGES, WATERWORKS, SEWERAGE AND IRRIGATION SYSTEMS, ROADS, DYKING AND WHARVES

The following engineering works were carried out on the various Reserves throughout Canada by the Department during the current fiscal year.

Bridges

Repairs were made for the maintenance of bridges on the following reserves: Montana, Alta., Manitoulin, Ont., Fort William, Ont., Alnwick, Ont., Tyendinaga, Ont., Six Nations, Ont., Maniwaki, Que., Tuquot, B.C., Chapel Island, N.S.

Dyking

Dyking works were carried out for the protection of farming land and the upkeep of highways on the following reserves:—Nyenza, N.S., Deadman's Creek, B.C., and St. Mary's B.C.

Irrigation Systems

Irrigation systems were constructed or improved on the following reserves in British Columbia, where farming operations are progressing: Soda Creek No. 1, and No. 2, Cayoosh Creek No. 2, Dog Creek, Williams Lake, Boston Bar, Canim No. 1, Fontaine Nos. 1 and 3, Lytton No. 18, Meadow Lake, Lower Nicholas, North Thompson and Kamloops.

Roads

Highways are gradually being constructed in co-operation with provincial Department of Highways and main roads improved on the following reserves:

Province of Ontario.—Tyendinaga, Rama, Alnwick, Muncey, Six Nations, Moravian, Oneida, Golden Lake, Walpole Island, Kettle Point, Sarnia, Shawanaga, Sheshegwaning, Cockburn Island, Gros Cap, Sheguiandah,

Province of Nova Scotia.—Eskasoni, Malagawatch, Salmon River, Whycocomagh.

Province of New Brunswick.—Big Cove.

Province of Manitoba.—Dog Creek, Oak Lake.

Province of Saskatchewan.—Kahkewistahaw.

Province of British Columbia.—Lillooet, Fraser Lake, Tachi, Canim Lake.

Province of Quebec.—Restigouche, Abenakis, Oka, Lorette, Bersimis, Maria, Maniwaki, Caughnawaga, St. Regis, Doncaster, Seven Islands, Temiscaming.

Sewerage Systems

Sewerage systems were installed on the following Indian Villages:—Last section and completion of main sewerage system at Odanak on the Abenakis Indian Reserve, Que.

Water Work Systems

Water supply systems were installed or improved to provide the following Indian Villages with water for domestic purposes, and for fire protection: Pointe Bleue, on the Ouiatchouan Indian Reserve, P.Q., Sliammon B.C., Massett, B.C., Fort William, Ont.

Wharves

The construction of a wharf was completed at Massett, B.C., in co-operation with the hospital authorities, the steamship company and the federal Department of Public Works.

SURVEYS

Listed hereunder are the principal surveys performed in respect to this department during the fiscal year ending March 31, 1929:—

British Columbia

Stikine Agency.—District Group lots Nos. 5456, 5458, 5459, 5460, 5461, 5463, 5464, 5465, 5466, 5467, 5468, 5469, 5470, 5473, 5474, and 5475 Cassiar District.

New Westminster Agency.—Franks Indian reserve No. 10, Sumas Indian reserve No. 12.

Lytton Agency.—Lytton Indian reserve Nos. 2A, 2B, 3B, 8, 9, 9B, 10, 11, 14A, 21B, 22A, 31, 32, 33. Boston Bar Indian reserve Nos. 2, 3 and 8. Squawtits No. 1, Pavilion No. 4, Popkum No. 1 and Skuppah No. 2B.

Kamloops Agency.—Hihium Lake Indian reserve No. 6, Deadman's Creek.

Nicola Agency.—Lower Nicola Indian reserve Nos. 9, 10, 12 and 13. Nicomen No. 2.

Skeena River Agency.—Nass Indian reserve, Nos. 45, 48, 49, 50, 51, 52, 53, 54, 57, 59, 60, 61, 68, 76, 80, 81, 82, 83, 84, 85, 86, 87 and 88. Tsimpsean Indian reserve, Nos. 7, 11A, 31, 35, 36, 37, 41, 42, 43, 44, 60, 61, 71, 72, 88, 89, District Group lots 3926, 3959, 3960, 3961 and 3962. Kincolith Indian reserve, Nos. 12A, 26A, 42 and 43, Coast District.

Queen Charlotte Agency.—Massett Indian reserve, Nos. 17, 18, 19, 20, 21, 22, 23, 24, 25, 26 and 27.

Williams Lake Agency.—Cemeteries at Redstone Flat, Chezacut and Nazco and reserve, Rich Bar No. 4.

New Brunswick

A new reserve was surveyed at Devon.

Quebec

The Chateauguay road through the village of Caughnawaga was surveyed.

Ontario

About one hundred islands in Georgian Bay were resurveyed and revalued. Subdivision was made of lot 42, Mud lake, a resurvey of Beaver lots in Caradoc and an additional subdivision was made at Whitefish Bay.

Manitoba

A survey was made of The Pas cemetery and connecting road.

Saskatchewan

A subdivision of Indian reserve No. 106A was made and a cruise of lands preparatory to selecting more reserves. The boundary between Ochapowace and Kakewistahaw reserves was run.

SUMMARY OF INDIAN AFFAIRS BY PROVINCES AND TERRITORIES

The local administration of the Indian lands, on the reserves scattered throughout the Dominion, is conducted through the Department's agencies, of which there are in all 116. The number of bands included in an agency varies from one to more than thirty. The staff of an agency usually includes various officers, in addition to the agent, such as the medical officer, clerk, farm instructor, field matron, nurse, constable, stockman, etc., according to the special requirements of the agency in question. At many of the smaller agencies in the older provinces, where the Indians are more advanced, the work is comparatively light, requiri g only the services of an agent. The work of the agencies is supervised by the department's inspectors. There are Indian Commissioners at Regina and Victoria, acting in a supervisory capacity for the Prairie Provinces and British Columbia respectively.

Ontario

Agencies.—The Indian Agency offices in Ontario are located as follows:—Brantford, Cape Croker, Chapleau, Chippewa Hill (Saugeen), Christian Island, Deseronto, Fenella (Alnwick), Fort Frances, Gore Bay, Hagersville, Highgate, Kenora, Longford Mills, Manitowaning, Moose Factory, Muncey, Parry Sound, Peterborough (Rice and Mud Lakes), Port Arthur, Port Perry, (Scugog), Ruby (Golden Lake), Sarnia, Sault Ste. Marie, Sutton West (Georgina and Snake Island), Sturgeon Falls, Thessalon and Walpole Island.

Tribal Origin.—The great majority of the Indians of Ontario are Ojibwas, and are of Algonquin stock. The Oneidas of the Thames, the Mohawks of the Bay of Quinte, the Mohawks of the Parry Sound district, and the Six Nations of the Grand River, are of Iroquoian stock. There is a band of Pottawattamies at Walpole Island, and Delawares at the Carodoc agency; these are of Algonkin sto k.

Occupations.—The Indians in the western and central parts of Ontario engage largely in farming. The reserves generally are well suited to this purpose and the activity of the department's field agents has resulted in a steady improvement both in the methods of operation and the results achieved. The success achieved by the returned so diers of this province has been especially creditable and they are rapidly developing prosperous communities.

During the summer months Indians find a profitable source of income as guides and canoe-men. Many are employed at various industries and trades, while railway and navigation companies employ a large number. As a rule they are excellent bushmen nd many find emp oyment in the various lumber camps. There is still an excellent market for snowshoes, canoes and mocassins, and these are usually manufactured by the other members of the community.

The women also have many sources of income ; some are employed as domestics; others support themselves by making baskets and fancy work. In certain districts berry-picking is an important item and furnishes considerable income.

Dwellings.—The great majority of the Ontario Indians have comfortable farmhouses which compare very favourably with those of their white neighbours. Many own houses of brick and stone, although in the outlying and more remote

districts the old log houses are in the majority. In the more settled districts the Indians have followed the examples of the whites and both houses and farm buildings are comfortable and of excellent construction.

New Ontario.—In the remote parts of Ontario hunting and fishing are still the chief sources of livelihood. Acting as guides and canoe-men during the summer months adds considerably to their income. While agriculture is not carried on to any extent, most of the bands grow considerable crops of potatoes and vegetables. They are, of necessity, more or less nomadic and consequently live in tents most of the year. This condition will greatly change as civilization progresses.

Quebec

Agencies.—The following agencies are included in the province of Quebec: Becancour, Bersimis, Caughnawaga, Gaspe, Lake St. John, Lorette, Maria, Mingan, Oka, River Desert, Restigouche, Seven Islands, St. Augustine, St. Regis, St. Francis, Temiskaming and Viger.

Tribal Origin.—The principal tribes found in Quebec are : Iroquois at Caughnawaga, Lake of the Two Mountains, and St. Regis; the Hurons of Lorette are also of Iroquoian stock; the Montagnais, who are of Algonkin stock, at Bersimis, Mingan, Lake St. John, Seven Islands; the Abenakis, also of Algonkin stock, at Becancour and St. Francis; the Micmacs, also of Algonkin stock, at Maria and Restigouche; and the Malecites, also of Algonkin stock, at Viger.

In the agricultural districts of the province the Indians are developing a keener interest in farming operations and are making decided progress. In the Gaspe peninsula the Indians find employment in the lumber camps and mills, but on the north shore of the gulf, fishing, hunting and trapping are still the principal sources of income. In the northern part of the province lumbering is the chief pursuit. One of the principal industries of the Indians of Quebec is making baskets, and many of the Indians spend the summer months at the resorts in order to dispose of the baskets, lacrosse sticks, racquets, mocassins, etc., to the tourists. Some of them, particularly in the Saguenay district, act as guides and canoe-men.

Dwellings.—In the older settled districts of the province the Indians own many excellent stone and brick houses. Generally speaking, the buildings are almost all of good construction, comfortable and sanitary. In the more remote districts, where hunting and trapping are still the principal occupations, the Indians necessarily live in tents during the greater part of the year.

The North Shore.—Along the north shore of the Gulf of St. Lawrence, the Indians have been taking a marked interest in the fishing industry. At Mingan, Natashkwan, Romaine, St. Augustine and Moisie, the fishing is under departmental supervision. Salmon and cod are the principal marketable fish, and are a source of considerable income to the Indians. The land is not suitable for extensive cultivation, but many of the Indians have very creditable gardens.

New Brunswick

Agencies.—There are three agencies in the province of New Brunswick, the Northeastern located at Richibucto, the Northern located at Perth, and the Southwestern located at Fredericton.

Tribal Origin.—The majority of the Indians of New Brunswick belong to the Micmac race, which is of Algonkin stock. In addition to these there are some bands of Malecites, also of Algonkin stock.

Occupations.—In the Northeast division the Indians are mostly engaged in fishing, hunting and trapping. Some farming is carried on, and the Indians have rather tended to increase their interest in this regard.

The lumbering industry employs quite a large number and the Indians all through the eastern provinces have become very proficient in the lumber camps, on the river drives and in the mills. In the northern division there is less, farming carried on, and the Indians during the summer months find employment generally as day labourers. In the Southern division they support themselves chiefly by the manufacture and sale of Indian wares.

Nova Scotia

Agencies.—There are eighteen Indian agencies in the province of Nova Scotia, namely: Yarmouth, Digby, Shelburne, Lunenburg, Annapolis, Kings, Windsor, Shubenacadie, Halifax, Cumberland, Colchester, Pictou, Antigonish-Guysboro, Richmond, Inverness, Victoria, Sydney and Eskasoni.

Tribal Origin.—The Indians of Nova Scotia are of Algonkin stock, and bear the distinctive name of Micmac.

Occupations.—They follow various occupations, but, as a rule, do not confine themselves to any particular one. Many of them cultivate the land with indifferent success, but as there are exceptions in almost every case, so it is with our Indians; a few of them are succeeding very well as farmers. The majority of those living near industrial centres usually work as day labourers. Hunting, trapping, and acting as guides for sportsmen are favourite occupations, more expecially with Indians of middle age. Basket-making and the manufacture of fancy mocassins, etc., are confined mostly to women. A profitable employment among Indians in a few sections of Nova Scotia is the manufacture of hockey sticks.

Dwellings.—With very few exceptions, Indians in Nova Scotia occupy houses of frame construction, well finished in the outside, but unfinished inside Every settlement, however, has a few comfortable dwellings well finished through out. Other buildings owned by Indians—barns and storehouses—are mostly of frame construction also.

Prince Edward Island

Agency.—One agency is sufficient for the purposes of the department in this province, as the total Indian population is only 295.

Tribal Origin.—The Indians of this province all belong o the Micmac tribe, which is of Algonkin stock.

Occupations.—But few of the Indians of Prince Edward Island are farmers. The principal industries are basket-making and fishing.

Manitoba

Agencies.—The following agencies are included in the province of Manitoba: Birtle, Clandeboye, Fisher River, Griswold, Manitowapah, Norway House, Pas and Portage la Prairie.

Tribal Origin.—The majority of the Indians of Manitoba belong to the Ojibwa race, which is of Algonkin stock. Bands of Swampy Crees are found at the Norway House and Fisher River agencies and in the York factory district; these are also of Algonkin stock. The Indians located at the Griswold agency are Sioux; there are also Sioux at the Birtle and Portage la Prairie agencies. There is a band of Chipewyans at Fort Churchill; this tribe is of Athapascan stock.

Occupations.—The reserves in Manitoba suitable for extensive agriculture are mainly within the Birtle, Griswold and Portage la Prairie agencies, and generally speaking progress has been satisfactory in recent years.

In the northern agencies the chief occupations are hunting, trapping and fishing. All of the northern Indians are expert guides and canoe-men, and many find employment in this way or with the transport or fur companies.

In the southern and more settled districts many of the younger people seek employment as day labourers, and owing to the high wages, have been fairly prosperous. The Indian women make needle-work, baskets, etc., for which there is a ready market.

Dwellings.—In recent years the Indians have adopted more sanitary methods of living. Their houses are more comfortably furnished and of better construction than formerly. In the north the nomadic life of the Indians does not permit of other than the old-fashioned log house, but even these are being greatly improved and in some cases are being replaced by suitable frame dwellings.

Saskatchewan

Agencies.—The following agencies are included in the province of Saskatchewan: Assiniboine, Battleford, Carlton, Crooked Lake, Duck Lake, File Hills, Isle à la Crosse, Moose Mountain, Onion Lake, Pelly, Qu'Appelle and Touchwood Hills.

Tribal Origin.—The most numerous tribes among the Saskatchewan Indians are the Ojibwas, Swampy Crees, and Plain Crees, which all belong to the great Algonkin stock. In addition to these, Sioux Indians are found at the Assiniboine, Moose Mountain, Qu'Appelle and Carlton agencies, and on the Moose Woods reserve. In the Onion Lake agency there is a band of Chipewyans, who are of Athapascan stock. There are also a few Chipewyan Indians in the Isle à la Crosse district.

The principal occupation of the Indians of Saskatchewan is mixed farming and stock-raising. The close supervision which the department has had over these Indians has greatly improved their methods of farming. Most of the Indians are well provided with machinery of good quality. As a rule they have good stock and suitable houses. In the outlying districts, however, hunting and trapping are still the main sources of income and will so remain until civilization encroaches upon the hunting grounds.

Dwellings.—The dwellings of the Indians on the reserves where farming is carried on are now mostly of frame construction. The out buildings, however, are generally of logs, but even there there has been some improvement.

Alberta

Agencies.—The following agencies are included in the Province of Alberta: Blackfoot, Blood, Edmonton, Hobbema, Peigan, Saddle Lake, Sarcee, Stony and Lesser Slave Lake.

Tribal Origin.—The Alberta Indians are of Algonkin stock, with the exception of the Sarcees near Calgary and the Beavers and Slaves in the Lesser Slave Lake agency, who are Apathapascan; the Paul's band in the Edmonton agency, who are Iroquoian; and the Stonies, who are of Siouan stock. The Algonkin Indians of Alberta are subdivided into Blackfoot nation, comprising the Indians of the Blackfoot, Blood and Peigan agencies; Plain Crees found in the Lesser Slave Lake, Saddle Lake, and Hobbema agencies, and a band of Ojibwas at Moberly Lake, in the Lesser Slave Lake agency.

The principal occupations of the Indians of Alberta are farming and stock-raising. Almost all the reserves in the settled districts of the province have large herds of horses and cattle.

In the northern parts of the province hunting and trapping are still almost the sole sources of income; there is practically no farming carried on and the construction of steamers on the Peace and Athabasca rivers, and of the railways to Peace River Crossing and Fort McMurray, have greatly lessened the wages of the Indians with the trading companies and transports.

Dwellings.—In the southern part of the province the dwellings and farm buildings are of excellent construction and quality. Almost all the reserves

where extensive farming is carried on boast of up-to-date modern dwellings, comfortable and well constructed. In the northern parts of the province the majority of the Indians continue to follow their primitive nomadic mode of life, and many of them still live in tents and tepees during the greater part of the year.

British Columbia

Agencies.—The following agencies are included in the Province of British Columbia: Babine and Upper Skeena, Bella Coola, Cowichan, Kamloops, Kootenay, Kwawkewlth, Lytton, New Westminster, Nicola, Okanagan, Queen Charlotte, Skeena, Stikine, Stuart Lake, Vancouver, West Coast, and Williams Lake.

Tribal Origin.—The Indians of the Bella Coola, Cowichan, Kamloops, Lytton, New Westminster, Vancouver, and Okanagan agencies belong to the Salish tribe. The Kootenay tribe is located in the agency of the same name. The Kwakiutl-Nootka tribe is located at the Kwawkewlth and West Coast agencies; the Haidas, in the Queen Charlotte islands; the Tlingits, in the Stikine; and the Tsimshians in the Skeena agency. The Indians of the Babine, Stuart Lake and Williams Lake agencies belong to the Athapascan race.

In addition to these there are about 2,500 nomadic Indians in the province who cannot be correctly classified according to linguistic stock or tribal origin.

Occupations.—The occupations of the Indians of British Columbia vary with their habitat. The Indians situated along the coast earn their livelihood principally by fishing. In many instances they own their own motor-launches, nets and gear, while others are supplied by the various canneries. Many of the women are also employed in the canneries or in the hop fields, and earn a steady income.

In the inland parts of the province some farming operations are carried on and particularly in the irrigated districts grain, fruits of all kinds, and vegetables have been raised with success. These Indians have been making marked progress in this regard and are now well equipped with modern machinery.

The Kootenay, Kamloops, Okanagan and New Westminster Indians own large herds of horses and cattle. While the Indians in the northern and remote parts of the province still depend upon hunting and trapping for their livelihood, the agents report a marked improvement in their manner of living.

Dwellings.—Except in the more remote districts the Indians of British Columbia have built comfortable and modern dwellings and outbuildings. Their progress in this respect has been rapid.

Northwest Territories

Agencies.—The department has now three agencies in the Northwest Territories, namely, Fort Simpson, Fort Smith, and Fort Resolution.

Tribal Origin.—The principal tribes found in the Far North are the Slave, Hares, Loucheux, Sicannies, Dogribs, Yellow-knives, Chipewyans and Caribou Eaters. All these tribes are of Athapascan stock. There are a few Crees in the neighbourhood of Chipewyan. These are of Algonkin stock. The most northerly tribes are the Takudah, who extend to the Mackenzie Delta; and the Copper Mines, who are located along the Coppermine river. The territory occupied by these two last-named tribes is contiguous to that inhabited by the Eskimos.

These Indians depend entirely upon hunting and trapping for a livelihood.

Occupations.—A few have been induced to raise small plots of potatoes. They own no horses or cattle, transportation being almost entirely by canoe along the great waterways, or by dogs in winter. They catch and preserve large quantities of whitefish for their own use and for consumption by their dog-trains in winter.

YUKON

Tribal Origin.—The Forty Mile, Blackstone, and Moosehide bands belong to the Takudah tribe. There is a band of Slavies at Lancing Creek who migrated from Fort Good Hope, on the Mackenzie river; another band of Slavies, called Nahanies, is located at the headwaters of the Pelly river. All these Indians are of Athapascan stock. At Mayo, Selkirk, Little Salmon and Carmacks there are bands belongting to the tribe known as Stick Indians. Bands belonging to the Tlingit tribe are found at Whitehorse, Teslin Lake, Champagne Landing, and Carcross.

Occupations.—Hunting, trapping and fishing are the chief occupations of the Yukon Indians, and they have been fairly successful during the past year. The women also derive some revenue from the sale of moccasins and curios of various kinds, while the men are expert at making toboggans and showshoes. Practically no farming is carried on owing to climatic conditions, but some of the Indians cultivate patches of potatoes and other vegetables.

FINANCIAL

At the close of the twelve months ended March 31, 1929, capital of the Indian Trust Fund, which at the end of the preceding year amounted to $13,203,366.84, had increased to $13,629,403.74.

The amounts expended fron the Consolidated Revenue Fund were as follows: Voted by Parliament for the purposes of the Department, $4,381,061.20, and annuities by statute, $217,231.00.

On March 31, 1929, the balance to the credit of the Indian Savings Account for the funding of the annuities and earnings of pupils at industrial schools was $212,588.20. Deposits and interest during the twelve months aggregated $43,963.93, and withdrawals, $38,353.71.

GENERAL

The complete census made by the department of the Indians of Canada, during the present year, 1929, will be found in Part II of this report, which follows herewith and therein also will be found statistics with regard to Grain, Vegetable and Root Production; Land, Private and Public Buildings and Property; Live Stock and Poultry; General Effects; Value of Real and Personal Property, and Progress during year; Sources and Value of Income; Schools ; Indian Land; Civil Government; Appropriation Accounts and Indian Trust Fund.

I have the honour to be, sir,

Your obedient servant,

DUNCAN C. SCOTT,
Deputy Superintendent General of Indian Affairs

PART II

TABULAR STATEMENTS

TABLE No. 1.—CENSUS OF INDIANS ARRANGED UNDER PROVINCES AND AGENCIES, 1929

Agency and Band	Number in Band	Religions							Under 6 years		From 6 to 15 inclusive		From 16 to 20 inclusive		From 21 to 65 inclusive		From 65 years upwards	
		Anglican	Baptist	United Church	Presbyterian	Roman Catholic	Other Christian Beliefs	Aboriginal Beliefs	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
ALBERTA																		
Blackfoot Agency—																		
Blackfoot	724	380	.....	.....	.....	313	.....	31	50	72	77	71	30	19	197	167	17	24
Blood Agency—																		
Blood	1,204	531	.....	.....	.....	542	.....	131	143	148	117	130	67	24	267	238	26	44
Edmonton Agency—																		
Alexander's	151	.....	.....	.....	.....	151	.....	.....	20	16	7	11	6	7	31	43	5	5
Enoch's	148	.....	.....	.....	.....	134	14	.....	12	13	8	15	11	5	28	33	11	12
Joseph's	170	.....	.....	.....	.....	170	.....	.....	10	13	24	16	17	10	22	23	18	17
Michel's	86	.....	.....	.....	.....	86	.....	.....	9	10	8	7	11	9	12	9	7	4
Paul's	159	.....	.....	115	.....	44	.....	.....	18	15	16	15	7	5	30	42	5	6
Total	714	.....	.....	115	.....	585	14	.....	69	67	63	64	52	36	123	150	46	44
Fort Smith Agency—																		
Chipewyans, Fort Chipewyan	307	.....	.....	.....	.....	251	56	.....	21	19	23	28	35	28	66	66	10	11
[1]Chipewyans, Fort Smith	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Cree, Fort Chipewyan	253	.....	.....	.....	.....	203	50	.....	15	19	24	26	33	27	42	47	9	11
Cree Chipewyan, Fort McKay	.....	.....	.....	.....	.....	86	9	.....	3	5	10	14	16	9	15	20	.....	3
Cree Chipewyan, Fort McMurray	179	1	.....	.....	.....	76	7	.....	7	9	6	15	4	4	18	17	2	2
Maurice, Fond du Lac	388	.....	.....	.....	.....	388	.....	.....	15	19	38	37	50	51	80	91	4	3
Stragglers, Janviers	44	.....	.....	.....	.....	44	.....	.....	4	6	1	5	3	7	10	7	1	.....
Total	1,171	1	.....	.....	.....	1,048	122	.....	65	77	102	125	141	126	231	248	26	30
Hobbema Agency—																		
Ermineskin's Band	254	.....	.....	.....	.....	253	.....	1	32	33	33	25	8	9	54	50	3	7
Louis Bull's Band	129	.....	.....	23	.....	105	.....	1	14	16	16	16	6	4	28	22	3	4
Montana Band	58	.....	.....	8	.....	31	.....	19	3	8	4	6	5	1	17	13	.....	1
Samson's Band	494	.....	.....	157	.....	322	.....	15	44	58	49	42	27	29	118	99	12	16
Total	935	.....	.....	188	.....	711	.....	36	93	115	102	89	46	43	217	184	18	28

[1]Q.V. Northwest Territories as to population.

Lesser Slave Lake—																		
Boyer River	131					131			13	15	20	13	10	8	28	19		5
Duncan's (Peace River Crossing)	45					45			2	2	7	7	3	7	10	7		
[1]Fort St. John																		
Fort Vermilion	91					91			15	10	13	8	10	2	16	16	1	
Grande Prairie and Dunvegan	112					112			13	15	8	13	1	13	24	22	2	1
[1]Hudson's Hope																		
Kinnosayo's	679	8				671			55	62	85	87	58	51	140	123	11	7
Little Red River	192					192			18	16	34	24	16	10	29	31	9	5
Moberly Lake	81					81			2	3	12	25	4	3	12	20		
Sturgeon Lake	311					311			39	29	34	45	21	28	50	50	9	6
[2]Upper Hay River																		
Wabasca	643	220				423			47	55	99	88	42	45	119	115	17	16
Whitefish Lake	197	153				44			16	21	18	21	13	21	38	41	5	3
Total	2,482	381				2,101			220	228	330	331	178	188	466	444	54	43
Onion Lake Agency—																		
Chipewyan, Cold Lake	289					289			17	19	36	27	16	14	70	63	11	16
Frog Lake	155	65				88		2	5	9	25	19	7	6	38	36	4	6
Kecheewin's	134					134			6	5	15	18	6	8	35	32	5	4
Total	578	65				511		2	28	33	76	64	29	28	143	131	20	26
Peigan Agency—																		
Peigan	402	195				182		25	55	32	38	36	21	15	104	76	10	15
Saddle Lake Agency—																		
Beaver Lake	84					84			8	4	14	6	2	4	16	30		
Chipewyan	50					50			3	3	4	3	3	1	14	19		
James Seenum's	275			186		89			16	29	24	24	19	16	59	77	5	6
Saddle Lake	470			220		250			53	55	45	36	27	24	103	115	7	5
To al	879			406		473			80	91	87	69	51	45	192	241	12	11
Sarcee Agency—																		
Bull's Head Band	146	83		5		45		13	16	13	10	18	4	8	31	25	9	12
Stony Agency—																		
Bearspaw	230			210		2		18	16	21	20	25	9	11	55	56	6	11
Chiniquay	122			119				3	13	8	13	10	4	8	26	30	4	6
Wesley	259			238				21	16	23	19	24	13	14	68	62	9	11
Total	611			567		2		42	45	52	52	59	26	33	149	148	19	28
Total, Alberta	9,864	1,636		1,281		6,513	136	280	864	928	1,054	1,056	645	565	2,120	2,052	257	305

[1]Q.V. British Columbia as to population.
[2]Q.V. Northwest Territories as to population.

TABLE No. 1.—CENSUS OF INDIANS ARRANGED UNDER PROVINCES AND AGENCIES, 1929—*Continued*

Agency and Band	Number in Band	Religions							Under 6 years		From 6 to 15 inclusive		From 16 to 20 inclusive		From 21 to 65 inclusive		From 65 years upwards	
		Anglican	Baptist	United Church	Presbyterian	Roman Catholic	Other Christian Beliefs	Aboriginal Beliefs	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
BRITISH COLUMBIA																		
Babine Agency—																		
Andimaul	46			20			26		4	4	3	5	4	6	8	10	1	1
Fort Babine	300					300			28	30	26	30	20	30	45	53	20	18
Getanmax (Hazelton)	275	200		8		10	50	7	24	26	20	25	25	35	45	65	6	4
Glen Vowell	106	1		2		2	101		8	10	10	12	14	16	20	14	1	1
Kishgegas	65	45		10			10		4	5	4	4	10	8	11	16	2	1
Kishpiox	325			275		10	25	15	20	25	24	26	20	25	70	80	20	15
Kitsegukla	200			170			30		15	14	10	16	25	20	39	46	7	8
Kitwanga	225	175		25			25		22	28	16	20	25	30	36	44	2	2
Kitwancool	60	56					4		5	6	5	6	9	10	8	9	1	1
Kuldoe	6			2				4							2	2	1	1
Moricetown	180					180			14	16	20	24	20	25	30	25	3	3
Old Fort Babine	100					100			8	10	10	12	14	15	16	14	1	
Rocher de Boule (Hagwilget)	130					130			10	16	12	14	18	20	15	16	4	5
Total	2,018	477		512		732	271	26	162	190	160	194	204	240	345	394	69	60
Bella Coola Agency—																		
Bella Bella	358			358					43	45	31	41	13	11	85	73	10	6
Bella Coola	249			249					33	29	23	30	9	11	63	38	7	6
Kitasoo	101			101					8	6	10	9	7	6	25	23	5	2
Kitimat	305			305					27	33	31	30	17	14	86	55	8	4
Kitlope	38			38					5	4	4	3	0	1	9	10	1	1
Owekano	65			65					6	2	4	9	1	4	19	18	1	1
Ulkatcho	120					120			9	11	21	15	4	7	19	26	5	3
Total	1,233			1,116		120			131	130	124	137	51	54	303	243	37	23
Cowichan Agency—																		
Cheerno (Beecher Bay)	37					37			6	2	3	3	1	1	7	7	5	2
Clemclemaluts	135			40		95			12	14	5	18	3	7	28	33	9	6
Comeaken	60					60			6	6	6	4	1	3	14	12	3	5
Comox	35			20		15			3	1	5	5	2		7	9	2	1
Cowichan Lake	8			8								1			3	2		2
Esquimalt	18			12		6			1	1	2	2		1	5	5		1
Halalt	23					23			2	2	2	2	1		6	7	1	
Khenipson	45			5		40			5	5	2	7	1	2	6	7	4	6
Kilpaulus	10					10			2	3		1			2	2		
Koksilah	16			8		8			1	1	1	1		1	2	4	2	3
Kulleets	79					79			8	7	8	8	4	6	15	15	6	2
Lyackson	50					50			4	7	10	5	3		10	7	2	2

Malakut	24					24			3	3	1	1		1	7	8		
Nanaimo	222			188		34			18	17	31	18	18	15	47	42	6	10
Pauquachen	53					53			2	3	11	8	3	3	10	9	2	2
Penelakut	240					240			13	24	20	31	15	13	49	49	12	14
Qualicum	2			2														2
Quamichan	245			90		155			17	25	25	23	5	10	58	57	12	13
Siccameen	44					44			2	1	3	10	4	1	10	10	2	1
Sonowas (Nanoose)	25			25					3	2	3	4	1	1	4	5	1	1
Somenos	170			45		125			19	21	12	24	4	6	36	37	4	7
Songhees	90			20		70			2	2	9	8	4	5	28	24	4	4
Sooke	28					28			2	3	1	4	1	1	7	6	1	2
Tsartlip	102			15		87			7	7	14	16	7	5	22	20	2	2
Tsawout	106			25		81			7	4	10	18	8	4	23	22	5	5
Tsekum	25					25				1	5	4	2		4	4	2	3
Total	1,892			503		1,389			145	162	189	226	88	86	410	403	87	96
Fort Simpson Agency—																		
Fort Nelson (Slaves)	83					83			10	8	7	2	8	3	20	19	2	4
Fort Nelson (Siccannies)	21					21			1	1	3	2	4		4	4	1	1
Total	104					104			11	9	10	4	12	3	24	23	3	5
Kamloops Agency—																		
Adams Lake (Sahhaltkum)	166					166			14	13	19	18	9	12	38	33	5	5
Ashcroft	58	48				10			4	6	6	4	3	1	14	16	1	3
Bonaparte	141					141			10	11	10	18	4	4	44	31	3	6
Deadman Creek	105					105			9	12	5	6	5	4	27	32	3	2
Kamloops	199					199			18	12	19	15	9	10	56	52	2	6
Little Shuswap Lake	102					102			4	12	13	10	1	4	26	27	2	3
North Thompson	132					132			5	4	22	14	11	8	31	32	4	1
Neskainlith (Halaut)	161					161			13	14	20	19	8	3	35	35	8	6
Total	1,064	48				1,016			77	84	114	104	50	46	271	258	28	32
Kootenay Agency—																		
Arrow Lake	3					3									2		1	
Lower—Columbia Lakes	73					73			4	5	12	5	7	4	15	16	2	3
Lower—Kootenay	112					112			7	8	7	8	4	7	31	29	4	7
Shuswap	45					45			3	1	3	7		5	10	12	1	3
St. Mary's	175					175			10	12	14	24	9	10	42	40	6	8
Tobacco Plains	91					91			12	9	10	9	1	3	17	19	5	6
Total	499					499			36	35	46	53	21	29	117	116	19	27
Kwawkewlth Agency—																		
Klawatsis and Matilpi	82	82							6	6	8	7	8	5	24	18	0	0
Koskemo and Klaskino	39							39	3	3	5	2	3	4	8	5	4	2
Kwashela	32							32	2	4	4	3	4	1	8	6	0	0
Kwatsino	7							7	0	0	1	0	0	1	2	1	1	1
Kwawkewlth	114	114							6	11	12	17	0	4	29	26	9	0
Kwiahkah	6						6		1	0	0	0	0	0	2	2	0	1
Mamilillikulla	95	95							5	7	19	17	3	1	21	19	2	1
Nakwakto	56	56							0	2	9	5	2	2	19	12	3	2
Nimkish	127	127							12	6	14	16	7	10	34	26	1	1
Nuwitti	38							38	3	3	4	1	1	1	12	10	2	1
Tanakteuk	57	57							1	3	6	4	0	1	23	17	0	2
Tsawaineuk	240	240							21	15	26	29	10	13	67	48	5	6
Wawlitsum or Salmon River	13						13		0	0	0	3	1	0	3	3	1	2

TABLE No. 1.—CENSUS OF INDIANS ARRANGED UNDER PROVINCES AND AGENCIES, 1929—*Continued*

Agency and Band	Number in Band	Religions							Under 6 years		From 6 to 15 inclusive		From 16 to 20 inclusive		From 21 to 65 inclusive		From 65 years upwards	
		Anglican	Baptist	United Church	Presbyterian	Roman Catholic	Other Christian Beliefs	Aboriginal Beliefs	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
BRITISH COLUMBIA—*Continued*																		
Kwawkewlth Agency—Concluded																		
Wewayakay or Cape Mudge	113						113		14	11	10	13	7	5	21	23	5	4
Wewayakum or Campbell River	69						69		7	9	9	4	2	2	13	12	4	7
Total	1,088	771					201	116	81	80	127	121	48	50	286	228	37	30
Lesser Slave Lake Agency—																		
Fort St. John	165					165			10	8	32	31	17	11	27	25	1	3
Hudson's Hope	128					128			4	4	23	23	12	7	23	26		6
Total	293					293			14	12	55	54	29	18	50	51	1	9
Lytton Agency—																		
Anderson Lake	40					40			5	2	2	1	2	2	11	10	3	2
Boothroyd	114	113				1			10	10	12	4	7	5	26	26	6	8
Boston Bar	115	46		11		58			11	11	18	12	7	5	24	23	3	1
Bridge River	92			6		86			6	1	11	8	3	5	27	21	5	5
Cayoose Creek No. 1	21					21			1	1	1	2	1	1	2	9	3	
Cayoose Creek No. 2	17	6				11			2	1	2	1	1		4	3	1	2
Cheam	67			6		61			4	7	10	8	4	3	14	13	2	2
Cisco	34	34							1	4	3	3	2	2	12	4		3
Fountain	227	1				226			10	16	25	24	8	6	70	63	2	3
Hope	74	6		2		66			7	3	11	9	6	4	14	16	3	1
Kanaka Bar	48	48							3	4	7	4	1	2	14	10	1	2
Lillooet	59	13				46			5		7	3	4	2	14	22	1	1
Lytton	462	459				3			33	34	47	52	15	21	118	108	19	15
Ohamil	43	3				40			1	2	10	5	3	3	9	7	3	
Pavilion	104					104			8	13	8	12	2	4	24	24	6	3
Popcum	10	3				7			1					1	3	5		
Seabird Island	132					132			13	16	14	23	6	7	24	24	3	2
Seton Lake	120					120			8	10	10	7	2	3	37	32	6	5
Shawahlook	14					14				1		1	2	1	5	3		1
Skuppah	16	16							2	1	2	3		1	4	3		
Spuzzum	95	51				44			7	4	8	16	2	3	23	21	5	6
Squawtits	26	8				17		1	1	1	5	3	2	3	3	6	1	1
Union Bar	65	7				58			7	9	9	9	3		13	12	1	2
Yale	31					31				3	6	2	1	3	8	5	1	2
Total	2,026	814		25		1,186		1	146	154	228	212	84	87	503	470	75	67

New Westminster Agency—																	
Aitchelitz	6				6			1	1	1		1		1	1		
Chehalis	132				132			12	14	13	18	8	6	26	27	3	5
Coquitlam	34				34			2	1	4	7	1	2	7	4	3	3
Douglas	42				42			1	5	5	2	1	3	13	9		3
Katzie	71				71			5	5	11	13	3	5	11	15	2	1
Kwaw-kwaw-Apilt	9				9							3	2	2	2		
Langley	40				40			4	2	4	7	2	1	12	8		
Matsqui	22				22				2	1	5		3	7	4		
New Westminster	7				7			1	1		1	1	1	1	1		
Pemberton	301				301			6	8	32	46	18	16	72	79	11	13
Samahquam	38				38			2	3	3	3	1	2	12	11		1
Scowlitz	23				23				1	1	1	3	3	5	8	1	
Semiahmoo	31				31			2	2	3	4	1	4	8	6	1	
Skookum Chuck	101				101			5	6	10	14	3	2	29	22	6	4
Skulkayn	14			14							4	1	1	4	4		
Skwah	94				94			4	4	9	10	15	5	19	16	6	6
Skway	24				24			1	3	1	4			7	6	1	1
Soowahlie	43			43				1	2	5	3	3	4	12	10	2	1
Squiala	9				9			1	1	1			1	3	2		
Sumas	37			37				2	1	5	5	3	3	8	5	1	4
Sumas Lakahahmen	44				44			4	4	2	5	4	2	12	9	1	1
Tsawwassen	36				36			1	2	1	2	2	1	13	10	2	2
Tzeachten	40			25	15			1	3	3	1	2	3	12	13	1	1
Whonnock	19				19			1	1	3	3	3	1	5	2		
Yakweakwioose	16				16			1			1			7	6	1	
Total	1,233			119	1,114			57	72	122	157	78	71	307	280	43	46
Nicola Agency—																	
Coldwater	105				105			5	6	8	7	7	5	30	33	3	1
Cook's Ferry	101	101						6	8	9	10	11	3	26	24	1	3
Lower Nicola	270	204			66			15	19	27	33	9	14	61	65	11	16
Nicomen	57	57						2	3	4	8	2	1	18	13	3	3
Oregan Jack Creek	16	16								2	2	1		6	4		1
Upper Nicola	159				159			5	10	25	22	9	6	39	35	4	4
Total	708	378			330			33	46	75	82	39	29	180	174	22	28
Okanagan Agency—																	
Okanagan	353	18			335			22	30	46	36	16	19	83	79	9	13
Osoyoos	58				58			5	3	6	7	5	3	12	9	4	4
Penticton	152				148	4		7	8	20	16	9	8	37	33	6	8
Similkameen	149	4			145			8	12	10	18	6	9	35	37	5	9
Spallumcheen	198				198			11	13	27	25	12	8	46	39	6	11
Total	910	22			884	4		53	66	109	102	48	47	213	197	30	45
Queen Charlotte Agency—																	
Massett	433	433						32	41	60	60	30	23	92	80	10	5
Skidegate	258			258				20	21	35	26	11	12	65	55	7	6
Total	691	433		258				52	62	95	86	41	35	157	135	17	11
Skeena River Agency—																	
Gitlakdamix	240	240						23	22	25	19	20	13	56	55	4	3
Greenville	235	235						22	33	29	27	20	12	40	41	6	5
Gwinaha	54	13				41		9	5	10	8	4	3	8	7		
Hartley Bay	111			111				2	3	20	15	11	4	24	17	8	7

TABLE No. 1.—CENSUS OF INDIANS ARRANGED UNDER PROVINCES AND AGENCIES, 1929—*Continued*

Agency and Band	Number in Band	Religions							Under 6 years		From 6 to 15 inclusive		From 16 to 20 inclusive		From 21 to 65 inclusive		From 65 years upwards	
		Anglican	Baptist	United Church	Presbyterian	Roman Catholic	Other Christian Beliefs	Aboriginal Beliefs	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
BRITISH COLUMBIA—*Concluded*																		
Skeena River Agency—Concluded																		
Kincolith	344	344	.....	.....	.....	.....	.....	.....	35	43	44	41	19	20	68	63	6	5
Kitkatla	245	245	.....	.....	.....	.....	.....	.....	29	19	30	30	10	17	48	50	8	4
Kitselas	91	.....	.....	70	.....	.....	21	.....	6	11	9	9	5	6	20	23	1	1
Kitsumkalum	19	.....	.....	17	.....	.....	2	.....	1	0	1	1	1	3	5	5	1	1
Metlakatla	174	150	.....	.....	.....	.....	24	.....	7	15	18	22	13	10	47	32	3	7
Port Essington	129	.....	.....	112	.....	.....	17	.....	13	17	12	15	4	11	32	21	2	2
Port Simpson	575	.....	.....	512	.....	.....	63	.....	31	26	53	60	46	24	147	155	15	18
Total	2,217	1,227	.....	822	.....	.....	168	.....	178	194	251	247	153	123	495	469	54	53
Stikine Agency—																		
Atlin (Atlin Lake)	77	41	.....	.....	.....	35	.....	1	3	6	10	12	7	4	16	13	5	1
Casca (McDames Creek)	64	7	.....	.....	.....	21	.....	36	5	6	4	5	3	10	15	12	3	1
Graham Ft. (Nomadic) McDames	40	7	.....	.....	.....	13	.....	20	2	1	3	4	3	4	9	11	2	1
Liard & Frances Lk. (Liard Post)	80	.....	.....	.....	.....	34	.....	46	1	5	16	6	4	6	12	21	5	4
Liard Lower (Nomadic) Liard P	30	.....	.....	.....	.....	8	.....	22	2	.....	4	5	1	1	7	8	2	.....
Nelson River (Nomadic) Liard P	111	.....	.....	.....	.....	48	.....	63	3	3	15	20	6	6	24	24	5	5
Tahltan (Telegraph Creek)	252	124	.....	.....	.....	122	.....	6	16	18	32	33	14	9	59	54	6	11
Teslin (Teslin Lake)	109	86	.....	.....	.....	10	.....	13	8	7	18	11	9	4	26	24	1	1
Total	763	265	.....	.....	.....	291	.....	207	40	46	102	96	47	44	168	167	29	24
Stuart Lake Agency—																		
Blackwater	3	.....	.....	.....	.....	3	.....	.....	.....	.....	1	.....	.....	.....	1	1	.....	.....
Burns Lake	17	.....	.....	.....	.....	17	.....	.....	2	1	.....	3	1	1	5	3	1	.....
Cheslatta	97	.....	.....	.....	.....	97	.....	.....	15	15	10	7	6	11	16	10	4	3
Decker Lake	5	.....	.....	.....	.....	5	.....	.....	1	2	.....	.....	.....	.....	1	1	.....	.....
Euchinico	17	.....	.....	.....	.....	17	.....	.....	2	1	2	3	1	.....	3	3	1	1
Francois Lake	43	.....	.....	.....	.....	43	.....	.....	5	9	7	4	.....	1	9	7	0	1
Fraser Lake	102	.....	.....	.....	.....	102	.....	.....	10	7	7	15	7	3	27	22	3	1
Fort Connelly (Bear Lake)	144	.....	.....	.....	.....	144	.....	.....	15	15	18	19	16	6	27	26	1	1
Fort George	53	.....	.....	.....	.....	53	.....	.....	3	2	7	6	1	0	19	13	2	.....
Fort Grahame	129	.....	.....	.....	.....	129	.....	.....	12	14	21	21	10	3	20	20	5	3
Grand Rapids	30	.....	.....	.....	.....	30	.....	.....	2	4	5	3	1	1	6	7	.....	1
Kluskus	38	.....	.....	.....	.....	38	.....	.....	1	2	.....	3	2	5	12	10	2	1
McLeod Lake	82	.....	.....	.....	.....	82	.....	.....	7	5	19	12	4	2	15	14	1	3
Maxim Lake	31	.....	.....	.....	.....	31	.....	.....	4	1	4	4	4	0	7	6	.....	1
Nazko	50	.....	.....	.....	.....	50	.....	.....	6	3	4	5	.....	5	13	12	2	.....
North Tacla Lake	29	.....	.....	.....	.....	29	.....	.....	1	1	2	4	1	2	7	7	2	2
Pintcoe	26	.....	.....	.....	.....	26	.....	.....	2	5	3	1	2	2	4	4	0	3
Stella	84	.....	.....	.....	.....	84	.....	.....	4	4	6	8	5	8	30	17	1	1
Stony Creek	166	.....	.....	.....	.....	166	.....	.....	21	16	22	20	8	6	30	29	9	5
Stuart Lake	235	.....	.....	.....	.....	235	.....	.....	21	24	29	27	21	19	49	35	6	4
Tatcoe	122	.....	.....	.....	.....	122	.....	.....	15	13	16	15	6	4	21	24	3	5

Tsislainli	41					41			3	5	1	4	3	2	13	10		
Yacutcee	74					74			6	7	13	11	5	4	11	12	2	3
Total	1,618					1,618			158	156	197	195	104	85	346	293	45	39
Vancouver Agency—																		
Burrard	52					52			5	1	6	7	1	3	12	14	2	1
Homalco	143					143			12	9	18	18	12	12	31	30	0	1
Klahoose	72					72			1	3	10	8	2	5	14	17	5	7
Musqueam	141					141			8	7	15	23	7	7	39	24	5	6
Sechelt	244					244			8	8	33	35	19	14	46	52	14	15
Sliammon	137					137			5	14	15	15	5	6	29	35	8	5
Squamish	426					426			25	31	53	56	19	14	99	99	14	16
Total	1,215					1,215			64	73	150	162	65	61	270	271	48	51
West Coast Agency—																		
Ahousaht	178				153	15		10	12	13	21	22	4	2	42	41	11	10
Checkleset	38					38				2	8	5	1		12	8	2	
Clayoquot	177				23	150		4	14	12	19	10	8	5	42	44	14	9
Ehatisaht	50				3	45		2	2	4	6	3	2	1	14	15	2	1
Hesquiat	127					127			8	11	13	20	3	6	24	29	8	5
Kelsemart	66				8	58			5	5	9	8	2	2	14	14	4	3
Kyuquot	104					99		5	5	3	4	7	7	5	31	30	8	4
Moachaht	85					80		5	7	2	8	6	2		28	25	3	4
Matchitlacht	36					36			4	2		3	3	1	12	9		2
Nitinat	158			150		1		7	12	9	19	14	3	8	38	42	6	7
Nuchatlitz	33					33			3	1	3	4	1		11	10		
Ohiet	128				122			6	8	14	17	11	5	5	29	34	2	3
Opetchisaht	49				49				2	4	10	7	2		10	12	1	1
Pacheena	54			19	31		4		5	3	6	2		1	15	12	4	6
Seshart	129				123			6	7	4	17	11	6	5	37	33	5	4
Toquart	34				34				7	1	5	8			7	6		
Uchucklesit	44			8	36				3	5	7	5	4	1	10	9		
Ucluelet	136				132			4	10	9	21	15	3	9	30	31	3	5
Total	1,626			177	714	682	4	49	114	104	193	161	56	51	406	404	73	64
Williams Lake Agency—																		
Alexandria	39					39			6	3	8	2	1	1	9	8		1
Alexis Creek	138					138			10	7	18	23	6	3	32	29	6	4
Alkali Lake	190					190			13	8	19	23	7	12	52	42	9	5
Anaham	228					228			30	26	18	18	13	15	45	46	8	9
Canim Lake	96					96			10	7	10	7	7	2	21	23	4	5
Canoe Creek	178					178			14	17	22	20	11	10	38	41	1	4
Clinton	39					39			4	3	2	3			15	11		1
High Bar	24					24			1	1	4	3	2	2	4	6		1
Nehmaiah Valley	39					39			4	3	6	3	2	2	10	8		1
Quesnel	55					55			4	3	8	7		1	14	10	3	5
Soda Creek	78					78			4	8	8	8	5	5	16	18	2	4
Stone	86					86			9	9	9	14	3	2	18	16	3	3
Toosey	57					57			6	6	7	4		3	14	15	2	
Williams Lake	155					155			9	15	12	16	12	7	33	40	7	4
Nomadic	4					4									2	1	1	
Total	1,406					1,406			124	116	151	151	69	65	323	314	46	47
Nomadic Indians, estimated	2,500																	
Total, British Columbia*	25,107	4,435		3,532	714	12,879	648	399	1,676	1,791	2,498	2,544	1,287	1,224	5,177	4,890	763	757

*No details as to ages or religions of 2,500 Indians available.

TABLE No. 1.—CENSUS OF INDIANS ARRANGED UNDER PROVINCES AND AGENCIES, 1929—*Continued*

Agency and Band	Number in Band	Religions							Under 6 years		From 6 to 15 inclusive		From 16 to 20 inclusive		From 21 to 65 inclusive		From 65 years upwards	
		Anglican	Baptist	United Church	Presbyterian	Roman Catholic	Other Christian Beliefs	Aboriginal Beliefs	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
MANITOBA																		
Birtle Agency—																		
Bird Tail Sioux	85	1	.....	.....	47	5	30	2	7	9	12	7	2	6	15	15	4	8
Gambler's	24	.....	.....	.....	.....	24	.....	.....	3	5	1	4	1	.....	4	5	1	.....
Keeseekoowenin	107	.....	.....	.....	85	19	1	2	12	5	10	13	4	6	20	22	5	10
Rolling River	102	.....	.....	.....	64	27	.....	11	17	7	9	12	2	2	21	20	5	7
Waywayseecappo	210	.....	.....	.....	159	31	.....	20	20	11	20	21	12	14	51	38	9	14
Total	528	1	.....	.....	355	106	31	35	59	37	52	57	21	28	111	100	24	39
Clandeboye Agency—																		
Berens River	286	.....	.....	216	.....	70	.....	.....	34	26	32	17	13	12	74	62	8	8
Black River	64	60	.....	.....	.....	4	.....	.....	5	2	4	9	5	2	14	17	2	4
Bloodvein	109	.....	.....	5	.....	88	.....	16	11	14	10	17	4	3	19	24	1	6
Brokenhead	190	153	.....	.....	.....	31	.....	6	8	8	17	18	11	8	53	54	7	6
[1]Deer Lake	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fort Alexander	593	226	.....	.....	.....	367	.....	.....	52	53	64	55	29	30	146	117	24	23
Grand Rapids	118	118	.....	.....	.....	.....	.....	.....	8	7	16	12	7	8	29	30	1	.....
Hollow Water River	129	82	.....	.....	.....	37	.....	10	10	9	16	17	8	8	23	24	8	6
Little Grand Rapids	281	.....	.....	220	.....	61	.....	.....	22	24	45	49	16	17	51	50	4	3
[1]Pekangekum	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Poplar River	170	.....	.....	132	.....	38	.....	.....	17	18	22	15	16	8	38	34	1	1
Roseau River	209	.....	.....	.....	.....	88	.....	121	27	23	25	22	11	7	42	37	10	5
St. Peters	165	130	.....	.....	.....	35	.....	.....	14	6	10	8	25	15	28	38	5	16
Total	2,314	769	.....	573	.....	819	.....	153	208	190	261	239	145	118	517	487	71	78
Fisher River Agency—																		
Fisher River	529	.....	.....	449	.....	4	76	.....	54	50	50	44	23	22	130	120	20	16
Jackhead	84	55	.....	.....	.....	29	.....	.....	11	13	12	12	5	7	9	11	2	2
Peguis	894	793	2	.....	.....	53	46	.....	83	75	107	111	40	30	207	187	27	27
Total	1,507	848	2	449	.....	86	122	.....	148	138	169	167	68	59	346	318	49	45
Griswold Agency—																		
Oak Lake	74	.....	.....	.....	30	40	1	3	9	4	6	7	3	3	21	17	2	2
Oak River	326	207	.....	.....	36	52	.....	31	28	33	33	35	16	13	67	69	14	18
Total	400	207	.....	.....	66	92	1	34	37	37	39	42	19	16	88	86	16	20

[1]Q.V. Ontario as to population.

Kenora and Savanne Agency—																		
Buffalo Point	46	2	.....	.....	.....	.....	.....	44	4	4	4	4	3	.....	13	9	3	2
Norway House Agency—																		
Cross Lake	573	.....	.....	286	.....	287	.....	.....	54	52	72	74	35	37	199	127	6	7
God's Lake	327	.....	.....	275	.....	52	.....	.....	32	41	38	43	19	22	52	66	5	9
Island Lake	713	.....	.....	513	.....	200	.....	.....	96	80	93	66	47	34	116	153	11	17
Norway House	732	162	.....	417	.....	153	.....	.....	78	73	80	75	43	38	150	172	9	14
Oxford House	381	.....	.....	381	.....	.....	.....	.....	37	3[illegible]	54	43	29	16	61	85	[illegible]	11
Total	2,72[illegible]	162	.....	1,872	.....	692	.....	.....	297	281	337	301	173	147	491	603	38	58
Pas Agency—																		
Chemawawin	129	129	.....	.....	.....	.....	.....	.....	14	6	17	10	8	4	31	34	2	3
[1]Cumberland	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Moose Lake	117	114	.....	.....	.....	3	.....	.....	8	8	12	13	5	5	29	32	2	3
Nelson House	517	.....	.....	402	.....	115	.....	.....	55	37	76	63	36	25	94	114	7	10
Pas	471	460	.....	.....	.....	11	.....	.....	42	33	57	56	25	23	104	113	8	10
[1]Red Earth	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
[1]Shoal Lake	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Split Lake	379	379	.....	.....	.....	.....	.....	.....	45	25	61	41	29	17	69	80	5	7
Total	1,613	1,082	.....	402	.....	129	.....	.....	164	109	223	183	103	74	327	373	24	33
Pelly Agency—																		
Valley River	103	.....	.....	.....	16	86	.....	1	8	10	17	10	1	.....	25	28	1	3
Portage la Prairie and Manitowapah Agency—																		
Manitowapah Division—																		
Crane River	78	30	.....	.....	.....	48	.....	.....	6	7	9	8	10	8	9	11	4	6
Ebb and Flow	114	.....	.....	.....	.....	114	.....	.....	5	6	9	11	14	4	26	25	6	8
Fairford	228	190	15	.....	.....	.....	23	.....	15	13	35	30	16	10	30	29	22	28
Lake Manitoba	161	44	.....	.....	.....	96	21	.....	9	13	15	16	10	13	25	30	18	12
Lake St. Martin	240	172	28	.....	.....	6	34	.....	15	14	25	17	17	12	40	35	31	34
Little Saskatchewan	185	145	22	.....	.....	.....	18	.....	12	11	14	17	10	20	29	26	24	22
Pine Creek	254	.....	.....	.....	.....	254	.....	.....	17	25	44	50	10	18	20	33	23	14
Sandy Bay	466	.....	.....	.....	.....	466	.....	.....	23	29	48	57	31	27	70	75	51	55
Shoal River	206	177	.....	.....	.....	29	.....	.....	9	11	20	23	13	15	25	35	22	33
Waterhen	98	.....	.....	.....	.....	98	.....	.....	7	7	8	9	7	5	19	20	11	5
Total	2,030	758	65	.....	.....	1,111	96	.....	118	136	227	238	138	132	293	319	212	217
Portage La Prairie Division—																		
Long Plain	190	.....	.....	.....	190	.....	.....	.....	11	17	15	16	10	18	35	35	16	17
Sioux Village	97	.....	.....	.....	97	.....	.....	.....	6	7	8	9	5	4	22	21	6	9
Swan Lake	145	.....	.....	.....	145	.....	.....	.....	11	13	15	16	8	9	23	24	13	13
Total	432	.....	.....	.....	432	.....	.....	.....	28	37	38	41	23	31	80	80	35	39
Churchill District—																		
Fort Churchill	203	203	.....	.....	.....	.....	.....	.....	13	29	37	31	7	5	36	44	.....	1
York Factory	361	361	.....	.....	.....	.....	.....	.....	25	35	54	52	14	17	83	75	3	3
Total	564	564	.....	.....	.....	.....	.....	.....	38	64	91	83	21	22	119	119	3	4
Total, Manitoba	12,263	4,393	67	3,296	869	3,121	250	267	1,109	1,043	1,458	1,365	715	627	2,410	2,522	476	538

[1]Q.V. Saskatchewan as to population.

TABLE No. 1.—CENSUS OF INDIANS ARRANGED UNDER PROVINCES AND AGENCIES, 1929—*Continued*

Agency and Band	Number in Band	Religions							Under 6 years		From 6 to 15 inclusive		From 16 to 20 inclusive		From 21 to 65 inclusive		From 65 years upwards	
		Anglican	Baptist	United Church	Presbyterian	Roman Catholic	Other Christian Beliefs	Aboriginal Beliefs	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
NEW BRUNSWICK																		
Northern Agency—																		
Edmundston	26					26			3	2	1	2	1	3	8	5		1
Tobique	252					252			18	21	37	30	18	13	54	49	5	7
Total	278					278			21	23	38	32	19	16	62	54	5	8
Northeastern Agency—																		
Gloucester County—																		
Bathurst Reserve	20					20			1	1	2				8	6	1	1
Kent County—																		
Big Cove Reserve	210					210			15	13	24	25	18	11	55	40	5	4
Buctouche Reserve	10					10				1	1	1	1		3	3		
Indian Island Reserve	35					35			2	2	4	4	3	1	8	6	2	3
Total	255					255			17	16	29	30	22	12	66	49	7	7
Northumberland County—																		
Burnt Church Reserve	241					241			15	18	34	27	13	15	55	51	6	7
Eel Ground Reserve	170					170			12	15	23	17	7	14	39	34	7	2
Red Bank Reserve	63					63			3	7	8	6	2	2	13	19	2	1
Total	474					474			30	40	65	50	2	31	107	104	15	10
Restigouche County—																		
Eel River Reserve	75					75			6	6	9	7	5	6	13	14	4	5
Westmoreland County—																		
Fort Folly Reserve	36					36					5	3	2	2	12	11		1
Total	860					860			54	63	110	90	51	51	206	184	27	24
Southwestern Agency—																		
Charlotte County	15					15			1	2	1		1		6	4		
Kingsclear York County	60					60			3	5	4	11	3	2	12	12	3	5
Kings County	47					47			4	3	6	7	5	4	7	6	2	3
Oromocto Sunbury County	90					90			8	8	11	16	3	1	22	1	1	3
Queens County	19					19			1	1	1	2	1	2	5	6		
St. John County	29					29			3	2	3	4	3	4	4	2	2	2

St. Mary's York County	116					116			8	14	8	15	5	9	27	27	1	2
Woodstock Carleton County	90					90			9	9	9	12	8	6	16	15	4	2
Total	466					466			37	44	43	67	29	28	99	89	13	17
Total, New Brunswick	1,604					1,604			112	130	191	189	99	95	367	327	45	49
Northwest Territories																		
Fort Resolution Agency—																		
Chipewyans of Resolution	137					137			8	12	21	18	8	7	24	39		
Dog-Ribs of Resolution	186					186			19	20	22	30	9	6	39	39	1	1
Dog-Ribs of Rae	766					766			79	85	87	67	36	35	174	187	6	10
Slaves of Hay River	111	51				60			7	12	18	12	4	6	26	23		3
Slaves of Providence	251					251			18	22	33	38	10	12	65	51	1	1
Yellow-Knives of Resolution	142					142			13	11	15	16	12	8	27	37	1	2
Total	1,593	51				1,542			144	162	196	181	79	74	355	376	9	17
Fort Smith Agency—																		
Chipewyans of Fort Smith	162					162			10	8	20	17	14	11	37	42	1	2
Fort Simpson Agency—																		
Aretic Red River (Loucheux No. 6)	178					178			24	16	23	19	12	10	29	40	2	3
Fort Good Hope (Hare Skins No. 5)	309					309			33	22	39	21	18	11	72	90	2	1
Fort Liard (Slaves No. 8)	225					225			21	15	27	34	18	8	44	54	1	3
Fort McPherson (Loucheux No. 7)	325	325							30	42	31	47	21	23	53	71	2	5
[1]Fort Nelson (Slaves)																		
[1]Fort Nelson (Siccannies)																		
Fort Norman (Hare Skins No. 4)	346	84				262			31	32	34	48	25	15	64	95	2	
Fort Simpson (Slaves No. 2)	312	143				169			37	32	49	35	25	9	54	64	2	5
Fort Wrigley (Slaves No. 3)	91					91			6	9	19	9	5	2	20	21		
*Absentees	109																	
*Nomads	500																	
Total	2,395	552				1,234			182	168	222	213	124	78	336	435	11	17
Lesser Slave Lake Agency—																		
Upper Hay River	465					291		174	42	33	77	57	35	47	70	78	15	11
Total, Northwest Territories*	4,615	603				3,229		174	378	371	515	468	252	210	798	931	36	47

[1] Q.V. British Columbia as to population.
*No details as to ages or religions of 609 Indians available.

TABLE No. 1.—CENSUS OF INDIANS ARRANGED UNDER PROVINCES AND AGENCIES, 1929—*Continued*

Agency and Band	Number in Band	Religions							Under 6 years		From 6 to 15 inclusive		From 16 to 20 inclusive		From 21 to 65 inclusive		From 65 years upwards	
		Anglican	Baptist	United Church	Presbyterian	Roman Catholic	Other Christian Beliefs	Aboriginal Beliefs	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
NOVA SCOTIA																		
Annapolis County—																		
Micmacs	94					94			8	7	12	7	4	10	21	19	4	2
Antigonish and Guysboro Counties—																		
Afton Reserve	106					106			12	8	14	6	3	3	30	23	3	4
Antigonish Landing	10					10				3	1	1			2	2	1	
Cook's Cove (Free Hold)	19					19			1	1	2	4	3		4	4		
Heatherton Reserve	36					36			3	1	3	2	5	2	8	7	3	2
Summerside Reserve	13					13			1		2	3			2	2		3
Total	184					184			17	13	22	16	11	5	46	38	7	9
Cape Breton County—																		
Eskasoni (Micmacs)	158					158			12	13	21	21	12	11	28	29	2	9
Cape Breton County—																		
Sydney (Micmacs)	125					125			10	11	19	12	5	12	33	21	1	1
Colchester County—																		
Millbrook	124					124			11	5	12	12	5	11	33	27	6	2
Cumberland County—																		
Franklin Manor (Micmacs)	98					97	1		12	9	3	3	5	4	35	24	3	
Digby County—																		
Bear River (Micmacs)	88					88			12	5	12	9	2	3	21	15	4	5
Halifax County—																		
Micmacs	157					157			11	10	27	31	13	12	23	26	3	1
Hants County—																		
Indian Brook (Micmacs)	41					41			3	2	8	5	2	2	8	6	4	1
Hants County—																		
Windsor (Micmacs)	15					15					2	3	2		5		1	2
Inverness County—																		
Malagawatch	42					42			5	4	6	5	3	2	7	6	1	3
Whycocomagh	182					182			20	18	23	19	9	10	35	33	7	8
Total	224					224			25	22	29	24	12	12	42	39	8	11

Kings County—																				
Micmacs	72	.....	.....	.....	.....	72	.....	.....	5	7	7	8	6	5	13	13	6	2
Lunenburg County—																				
Micmacs	11	.....	.....	.....	.....	11	.....	.....	.....	.....	.....	.....	.....	.....	6	5	.....	.....
Pictou County—																				
Fishers Grant	158	.....	.....	.....	.....	158	.....	.....	16	5	21	17	4	5	48	31	6	5
Richmond County—																				
Chapel Island (Micmacs)	180	.....	.....	.....	.....	180	.....	.....	13	17	16	26	6	17	49	31	3	2
Shelburne County—																				
Micmacs	40	.....	15	1	.....	24	.....	.....	4	2	4	0	1	4	12	7	5	1
Victoria County—																				
Middle River (Micmacs)	111	.....	.....	.....	.....	111	.....	.....	10	14	12	16	7	4	29	18	1	.....
Yarmouth County—																				
Micmacs	49	.....	.....	.....	.....	49	.....	.....	4	3	5	5	5	7	6	6	3	5
Total, Nova Scotia	1,929	.....	15	1	.....	1,912	1	.....	173	145	232	215	102	124	458	355	67	58

TABLE No. 1.—CENSUS OF INDIANS ARRANGED UNDER PROVINCES AND AGENCIES, 1929—*Continued*

Agency and Band	Number in Band	Religions							Under 6 years		From 6 to 15 inclusive		From 16 to 20 inclusive		From 21 to 65 inclusive		From 65 years upwards	
		Anglican	Baptist	United Church	Presbyterian	Roman Catholic	Other Christian Beliefs	Aboriginal Beliefs	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
ONTARIO																		
Alnwick—																		
Mississaguas of Alnwick	262	.....	.....	262	.....	.....	.....	.....	23	13	23	27	21	10	69	70	4	2
Cape Croker—																		
Chippewas of Nawash	468	8	.....	253	.....	207	.....	.....	36	38	48	50	22	19	115	97	17	26
Caradoc Agency—																		
Chippewas of Thames	500	200	.....	250	.....	.....	50	.....	51	41	32	31	44	41	120	108	14	18
Munceys of Thames	130	50	.....	70	.....	.....	10	.....	12	10	19	19	4	3	29	24	5	5
Oneidas of Thames	859	239	120	325	.....	.....	.....	175	92	74	96	93	34	31	225	169	26	19
Total	1,489	489	120	645	.....	.....	60	175	155	125	147	143	82	75	374	301	45	42
Chapleau Agency—																		
Metagama	88	88	.....	.....	.....	.....	.....	.....	7	3	6	9	10	7	16	25	3	2
Michipicoten	137	97	.....	.....	.....	40	.....	.....	11	12	13	10	11	15	22	27	7	9
Mississagua	21	.....	.....	.....	.....	21	.....	.....	.....	1	1	2	3	4	5	4	.....	1
Moose Factory Crees, Chapleau	94	94	.....	.....	.....	.....	.....	.....	6	4	11	6	10	8	17	21	4	7
Moose Factory Crees, Missanabie	55	55	.....	.....	.....	.....	.....	.....	3	4	4	6	6	6	9	14	3	.....
Ojibeways, Brunswick Post	129	129	.....	.....	.....	.....	.....	.....	7	8	10	11	20	13	28	26	2	4
Ojibeways, Chapleau	38	38	.....	.....	.....	.....	.....	.....	2	3	3	2	3	4	9	12	.....	.....
Ojibeways, Flying Post	50	50	.....	.....	.....	.....	.....	.....	2	4	4	5	3	5	9	14	2	2
Spanish River	44	.....	.....	.....	.....	44	.....	.....	2	4	3	4	9	6	6	9	.....	1
Total	656	551	.....	.....	.....	105	.....	.....	40	43	55	55	75	68	121	152	21	26
Christian Island—																		
Chippewas of Beausoleil	303	.....	.....	214	.....	89	.....	.....	21	26	29	34	20	12	76	72	5	8
Clandeboye Agency—																		
Deer Lake	314	.....	.....	314	.....	.....	.....	.....	36	40	34	36	22	14	52	57	4	19
Pekangekum	224	.....	.....	110	.....	.....	.....	114	28	24	39	27	19	12	32	38	2	3
Total	538	.....	.....	424	.....	.....	.....	114	64	64	73	63	41	26	84	95	6	22
Fort Frances Agency—																		
Couchiching	276	.....	.....	.....	.....	244	.....	32	34	26	37	28	11	22	50	53	7	8
Hungry Hall No. 1	20	.....	.....	.....	.....	.....	.....	20	2	3	.....	1	.....	1	3	8	1	1
Hungry Hall, No. 2	9	.....	.....	.....	.....	.....	.....	9	.....	.....	1	.....	1	.....	1	6	.....	.....
Lac La Croix	99	.....	.....	.....	.....	.....	.....	99	10	5	9	12	2	1	21	31	2	6
Little Fork	43	.....	.....	.....	.....	.....	.....	43	6	6	3	2	1	3	10	10	1	1

Long Sault, No. 1	19	3	.....	.....	.....	.....	.....	16	.....	2	2	2	1	1	3	5	2	1
Long Sault No. 2	33	10	.....	.....	.....	.....	.....	23	1	3	2	4	1	3	6	8	2	3
Manitou Rapids Reserve, No. 1	67	.....	.....	.....	.....	.....	.....	67	10	3	2	5	3	2	16	16	8	2
Manitou Rapids Reserve, No. 2	35	.....	.....	.....	.....	1	.....	34	5	4	5	2	1	2	8	6	1	1
Nickickonsemincaning	35	.....	.....	.....	.....	.....	.....	35	1	.....	6	4	2	4	10	6	.....	2
Naicatchewening	64	.....	.....	.....	.....	11	.....	53	9	7	6	8	4	4	12	14	.....	.....
Seine River	132	.....	.....	.....	.....	.....	.....	132	15	8	17	15	8	2	22	35	6	4
Stangecoming	22	.....	.....	.....	.....	.....	.....	22	.....	1	.....	2	.....	2	4	7	3	3
Sturgeon Lake	3	.....	.....	.....	.....	.....	.....	3	.....	.....	.....	.....	.....	.....	1	.....	.....	2
Total	857	13	.....	.....	.....	256	.....	588	93	68	90	85	35	47	167	205	33	34
Fort William Agency—																		
Fort William	200	.....	.....	.....	.....	200	.....	.....	9	10	19	12	23	21	37	50	9	10
Gull Bay	122	1	.....	.....	.....	121	.....	.....	8	12	18	17	11	10	19	24	2	1
Long Lake	226	.....	.....	.....	.....	226	.....	.....	21	20	23	25	18	15	45	52	3	4
Martin Falls	167	.....	.....	.....	.....	167	.....	.....	20	22	24	28	12	6	20	31	.....	4
Pays Platt	33	.....	.....	.....	.....	33	.....	.....	1	3	4	3	6	2	5	8	1	.....
Pic	280	.....	.....	.....	.....	280	.....	.....	26	25	26	33	20	21	60	60	4	5
Red Rock	227	20	.....	.....	.....	207	.....	.....	24	25	30	25	11	7	40	54	8	3
Sand Point	61	3	.....	.....	.....	58	.....	.....	4	5	6	7	7	4	8	15	2	3
Various places	54	4	.....	.....	.....	50	.....	.....	3	4	7	5	8	4	8	10	4	1
Whitesand and Jackfish	170	.....	.....	.....	.....	170	.....	.....	20	15	10	14	18	12	31	47	3	.....
Total	1,540	28	.....	.....	.....	1,512	.....	.....	136	141	167	169	134	102	273	351	36	31
Georgina Island Agency—																		
Chippewas of Georgina and Snake Islands	140	4	.....	136	.....	.....	.....	.....	12	9	15	8	5	10	38	34	6	3
Golden Lake Agency—																		3
*Algonquins of Golden Lake	206	.....	.....	.....	.....	206	.....	.....	14	8	9	12	14	9	54	35	5	
Gore Bay Agency—																		
Cockburn Island	48	7	.....	.....	.....	41	.....	.....	3	2	5	3	5	2	13	10	3	2
Sheshegwaning	120	27	.....	.....	.....	93	.....	.....	6	8	9	9	7	11	34	25	6	5
West Bay	293	.....	.....	.....	.....	293	.....	.....	22	23	18	26	17	16	74	73	11	13
Total	461	34	.....	.....	.....	427	.....	.....	31	33	32	38	29	29	121	108	20	20
Kenora and Savanne Agency—																		
Kenora Division—																		
Assabaska	179	4	.....	.....	3	26	.....	146	15	23	15	18	10	8	38	43	3	6
Big Island	102	.....	.....	.....	.....	9	.....	93	6	7	10	14	5	6	25	22	3	4
[1]Buffalo Point	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Dalles	63	19	.....	.....	7	22	.....	15	3	5	7	6	.....	5	20	16	1	.....
Islington	260	159	.....	.....	4	30	.....	67	33	18	29	25	11	15	60	53	6	10
North West Angle No. 33	46	.....	.....	.....	4	5	.....	37	8	2	5	6	2	4	11	8	.....	.....
North West Angle No. 37	82	2	.....	.....	2	4	.....	74	7	4	10	14	6	2	19	16	3	1
Rat Portage	91	4	.....	.....	5	22	.....	60	8	6	9	8	6	5	28	18	2	1
Shoal Lake No. 39	103	.....	.....	.....	38	.....	.....	65	11	12	14	11	.....	7	23	22	2	1
Shoal Lake No. 40	112	.....	.....	.....	32	16	.....	64	12	6	18	10	9	5	24	25	1	2
Whitefish Bay	88	.....	.....	.....	1	7	.....	80	5	7	19	9	3	4	17	22	2	.....
Total	1,126	188	.....	.....	96	141	.....	701	108	90	136	121	52	61	265	245	23	25

[1]Q.V. Manitoba as to population.

TABLE No. 1.—CENSUS OF INDIANS ARRANGED UNDER PROVINCES AND AGENCIES, 1929—*Continued*

Agency and Band	Number in Band	Religions							Under 6 years		From 6 to 15 inclusive		From 16 to 20 inclusive		From 21 to 65 inclusive		From 65 years upwards	
		Anglican	Baptist	United Church	Presbyterian	Roman Catholic	Other Christian Beliefs	Aboriginal Beliefs	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
ONTARIO—*Continued*																		
Kenora and Savanne Agency—Concluded																		
Savanne Division—																		
Eagle Lake	64	3	.....	.....	.....	27	.....	34	5	4	6	12	7	3	9	15	3	.....
Frenchman's Head	148	138	.....	.....	1	4	.....	5	16	12	14	22	9	4	36	35	.....	.....
Grassy Narrows	194	51	.....	.....	.....	117	.....	26	22	17	22	24	14	11	42	34	5	3
Ignace	72	13	.....	.....	.....	27	.....	32	8	11	8	7	2	.....	13	20	1	2
Lac des Mille Lacs	60	.....	.....	.....	2	19	.....	39	3	4	5	5	3	4	11	20	3	2
Lac Seul	468	437	.....	.....	.....	25	.....	6	47	37	74	71	25	26	98	80	5	5
Wabigoon	118	18	.....	.....	.....	34	.....	66	13	7	13	17	1	4	26	28	3	6
Wabuskang	42	15	.....	.....	.....	13	.....	14	7	3	2	2	3	2	10	9	2	2
Total	1,166	675	.....	.....	3	266	.....	222	121	95	144	160	64	54	245	241	22	20
Manitowaning Agency—																		
Manitoulin Island Unceded	1,369	.....	.....	.....	.....	1,369	.....	.....	90	82	163	162	63	71	339	325	43	31
Point Grondin	43	.....	.....	11	.....	32	.....	.....	3	2	2	2	1	3	11	15	3	1
Sheguiandah	114	64	.....	.....	.....	50	.....	.....	5	6	13	12	7	10	25	25	6	5
South Bay	51	.....	.....	.....	.....	51	.....	.....	3	4	3	2	3	5	15	12	2	2
Spanish River No. 3	140	.....	.....	.....	.....	140	.....	.....	5	7	15	15	14	3	34	35	3	9
Sucker Creek	79	65	.....	.....	.....	14	.....	.....	2	5	6	9	5	6	16	22	7	1
Sucker Lake	12	.....	.....	.....	.....	12	.....	.....	2	1	.....	.....	.....	.....	5	4	.....	.....
Tahgaiwenene	130	.....	.....	.....	.....	130	.....	.....	9	5	11	9	6	7	37	43	2	1
Whitefish Lake	142	.....	.....	3	.....	139	.....	.....	8	13	12	16	5	6	34	40	2	6
Whitefish River	107	35	.....	.....	.....	72	.....	.....	7	6	12	13	2	3	27	30	4	3
Total	2,187	164	.....	14	.....	2,009	.....	.....	134	131	237	240	106	114	543	551	72	59
Moravian Agency—																		
Moravians	245	108	.....	137	.....	.....	.....	.....	13	15	11	22	13	13	75	64	11	8
New Credit Agency—																		
Mississaguas of the Credit	298	30	12	210	12	.....	34	.....	24	23	37	20	6	14	74	80	10	10
Parry Sound Agency—																		
Gibson (Watha)	133	.....	.....	133	.....	.....	.....	.....	14	9	17	11	5	8	37	23	5	4
Henvey Inlet	151	.....	.....	.....	.....	151	.....	.....	11	23	21	17	14	8	27	22	3	5
Magnetawan	50	.....	.....	5	.....	45	.....	.....	5	1	7	7	4	4	9	10	1	2
Moose Point	43	.....	.....	33	.....	10	.....	.....	3	2	11	.....	5	5	5	10	.....	2
Parry Island	253	.....	.....	165	.....	87	1	.....	25	18	34	12	18	9	62	48	13	14
Shawanaga	125	1	.....	76	.....	48	.....	.....	7	10	14	11	7	12	28	19	9	8
Total	755	1	.....	412	.....	341	1	.....	65	63	104	58	53	46	168	132	31	35

Rama Agency—																		
Chippewas of Rama	303	2	.....	277	.....	24	.....	.....	22	17	25	31	13	11	84	75	11	14
Rice Lake Agency—																		
Mississaguas of Mud Lake	282	.....	.....	282	.....	.....	.....	.....	26	22	27	29	12	16	75	60	11	4
Mississaguas of Rice Lake	79	.....	.....	79	.....	.....	.....	.....	2	1	10	6	6	8	22	14	4	6
Total	361	.....	.....	361	.....	.....	.....	.....	28	23	37	35	18	24	97	74	15	10
Sarnia Agency—																		
Chippewas of Kettle and Stony Points	147	39	.....	108	.....	.....	.....	.....	3	2	13	12	29	30	24	29	3	2
Chippewas of Sarnia	295	33	.....	262	.....	.....	.....	.....	21	14	19	16	25	26	80	80	9	5
Total	442	72	.....	370	.....	.....	.....	.....	24	16	32	28	54	56	104	109	12	7
Saugeen Agency—																		
Chippewas of Saugeen	403	26	.....	322	.....	32	23	.....	26	29	29	27	26	23	99	91	31	22
Sault Ste. Marie Agency—																		
Batchewana	302	.....	.....	.....	.....	302	.....	.....	10	12	31	29	25	18	87	77	7	6
Garden River	338	130	.....	.....	.....	208	.....	.....	12	11	26	35	22	19	90	102	8	13
Michipicoten	116	.....	.....	.....	.....	116	.....	.....	4	4	10	12	4	12	34	23	10	3
Total	756	130	.....	.....	.....	626	.....	.....	26	27	67	76	51	49	211	202	25	22
Scugog Agency—																		
Mississaugas of Scugog	19	.....	.....	19	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	5	4	3	5
Non-Treaty Indians	25	.....	.....	25	.....	.....	.....	.....	3	3	4	.....	6	.....	7	.....	2	.....
Total	44	.....	.....	44	.....	.....	.....	.....	3	3	4	.....	8	.....	12	4	5	5
Six Nations Superintendency—																		
Six Nations of the Grand River	4,491	1,403	906	739	.....	.....	468	975	258	239	331	313	472	477	879	824	376	322
Sturgeon Falls Agency—																		
Dokis	159	.....	.....	.....	.....	159	.....	.....	17	13	20	14	10	12	28	41	2	2
Matachewan	82	.....	.....	.....	.....	82	.....	.....	6	8	6	10	7	8	16	19	1	1
Nipissing	398	.....	.....	.....	.....	398	.....	.....	28	38	76	50	12	10	75	103	4	2
Temagami	78	.....	.....	.....	.....	78	.....	.....	10	6	10	4	2	3	16	24	1	2
Total	717	.....	.....	.....	.....	717	.....	.....	61	65	112	78	31	33	135	187	8	7
Thessalon Agency—																		
Mississauga River	114	.....	.....	.....	.....	114	.....	.....	9	14	8	11	5	8	24	28	2	5
Serpent River	127	.....	.....	.....	.....	127	.....	.....	7	9	12	16	12	9	32	25	2	3
Spanish River Band 1	250	.....	.....	.....	.....	250	.....	.....	13	20	21	19	21	25	69	52	4	6
Spanish River Band 2	40	26	.....	.....	.....	14	.....	.....	3	2	2	3	2	4	10	11	1	2
Thessalon	84	.....	.....	.....	.....	84	.....	.....	7	4	10	8	4	7	17	23	1	3
Total	615	26	.....	.....	.....	589	.....	.....	39	49	53	57	44	53	152	139	10	19
Timiskaming Agency—																		
Abitibi (Ont.)	86	.....	.....	.....	.....	86	.....	.....	13	10	6	4	6	5	16	18	3	5
Argonaut and Larder Lake	55	.....	.....	.....	.....	55	.....	.....	5	6	5	7	3	3	11	12	1	2
Total	141	.....	.....	.....	.....	141	.....	.....	18	16	11	11	9	8	27	30	4	7

TABLE No. 1.—CENSUS OF INDIANS ARRANGED UNDER PROVINCES AND AGENCIES, 1929—*Continued*

Agency and Band	Number in Band	Religions							Under 6 years		From 6 to 15 inclusive		From 16 to 20 inclusive		From 21 to 65 inclusive		From 65 years upwards	
		Anglican	Baptist	United Church	Presbyterian	Roman Catholic	Other Christian Beliefs	Aboriginal Beliefs	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
ONTARIO—*Concluded*																		
Tyendinaga Agency—																		
Mohawks of Bay of Quinte	1,550	1,542	.....	.....	.....	.....	8	.....	129	119	150	156	86	79	380	390	33	28
Walpole Island Agency—																		
Chippewas	587	333	.....	236	.....	18	.....	.....	29	31	46	40	24	21	181	172	21	22
Pottawattamies	169	35	.....	127	.....	.....	.....	7	9	9	22	16	11	10	43	43	2	4
Non-members of any Band	126	57	.....	69	.....	.....	.....	.....	7	10	16	13	9	6	36	29	.....	.....
Total	882	425	.....	432	.....	18	.....	7	45	50	84	69	44	37	260	244	23	26
**District of Patricia*—																		
Albany	653	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Attawapiscat	563	6	.....	.....	.....	557	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bear Island	139	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Cat Lake	137	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
English River	99	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fort Hope and Landsdown	584	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fort Severn	84	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Martin Falls	143	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Moose Factory	369	363	.....	.....	.....	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
New Post	20	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Osnaburgh	498	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Trout Lake	627	627	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Winisk River	102	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total	4,018	996	.....	.....	.....	563	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total, **Ontario*	27,420	6,915	1,038	5,252	111	8,269	594	2,782	1,769	1,638	2,292	2,186	1,628	1,559	5,302	5,202	920	863

*No details as to ages of 4,061 Indians available.
*No details as to religions of 2,459 Indians available.

TABLE No. 1.—CENSUS OF INDIANS ARRANGED UNDER PROVINCES AND AGENCIES, 1929

Agency and Band	Number in Band	Religions							Under 6 years		From 6 to 15 inclusive		From 16 to 20 inclusive		From 21 to 65 inclusive		From 65 years upwards	
		Anglican	Baptist	United Church	Presbyterian	Roman Catholic	Other Christian Beliefs	Aboriginal Beliefs	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
PRINCE EDWARD ISLAND																		
Prince Edward Island—																		
Lennox Island	221	.....	.....	.....	.....	221	.....	.....	12	22	25	20	15	17	52	50	5	3
Morell	21	.....	.....	.....	.....	21	.....	.....	2	1	3	2	1	3	3	1	3	2
Rocky Point	21	.....	.....	.....	.....	21	.....	.....	3	2	2	1	3	1	1	3	2	2
Scotchfort	32	.....	.....	.....	.....	32	.....	.....	5	1	2	1	5	6	4	3	3	2
Total	295	.....	.....	.....	.....	295	.....	.....	22	26	32	24	24	27	60	57	13	10

TABLE No. 1.—CENSUS OF INDIANS ARRANGED UNDER PROVINCES AND AGENCIES, 1929—*Continued*

Agency and Band	Number in Band	Religions							Under 6 years		From 6 to 15 inclusive		From 16 to 20 inclusive		From 21 to 65 inclusive		From 65 years upwards	
		Anglican	Baptist	United Church	Presbyterian	Roman Catholic	Other Christian Beliefs	Aboriginal Beliefs	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
QUEBEC																		
Bécancour Agency—																		
Abenakis of Bécancour	20	.....	.....	.....	.....	.....	20	.....	2	2	.....	3	2	.....	6	3	1	1
Bersimis Agency—																		
Montagnais of Bersimis	681	.....	.....	.....	.....	681	.....	.....	63	55	90	71	32	26	162	145	17	20
Montagnais of Escoumains	35	.....	.....	.....	.....	35	.....	.....	1	3	2	3	2	0	7	10	4	3
Total	716	.....	.....	.....	.....	716	.....	.....	64	58	92	74	34	26	169	155	21	23
Cocouna Agency—																		
Amalicites of Viger	156	.....	.....	.....	.....	156	.....	.....	13	13	15	18	8	11	27	36	3	12
Caughnawa Agency—																		
Iroquois of Caughnawaga	2,475	.....	.....	235	.....	2,228	.....	12	170	185	260	291	150	155	525	629	70	40
Jeune Lorette Agency—																		
Hurons of Lorette	485	.....	.....	.....	.....	482	3	.....	27	30	47	38	17	23	124	146	18	15
Maniwaki Agency—																		
River Desert	502	11	.....	.....	.....	491	.....	.....	27	31	62	49	30	19	118	135	10	21
Maria Agency—																		
Micmacs of Maria	152	.....	.....	.....	.....	152	.....	.....	22	17	16	13	4	8	32	34	3	3
Mingan Agency—																		
Montagnais of Mingan	113	.....	.....	.....	.....	113	.....	.....	12	17	7	8	6	4	24	31	3	1
Oka Agency—																		
Gibson	45	.....	.....	45	.....	.....	.....	.....	1	2	2	3	5	6	10	9	5	2
Oka	406	.....	.....	260	.....	146	.....	.....	26	42	32	57	13	21	90	78	28	19
Total	451	.....	.....	305	.....	146	.....	.....	27	44	34	60	18	27	100	87	33	21
Pierreville Agency—																		
Abenakis of St. Francis	233	31	.....	.....	.....	202	.....	.....	24	19	24	16	8	10	45	64	9	14
Pointe Bleue Agency—																		
Montagnais of Pointe Bleue	670	56	.....	.....	.....	614	.....	.....	74	65	79	91	47	39	127	114	20	14
Restigouche Agency—																		
Micmacs of Restigouche	583	.....	.....	.....	.....	583	.....	.....	58	44	63	79	31	26	133	113	22	14

*Ste. Augustine Agency—																		
Natashkwan	101					101												
Romaine	132					132												
Ste. Augustine	53					53												
Total	286					286												
St. Regis Agency—																		
Iroquois of St. Regis	1,571			91		1,446	34		89	127	155	156	97	79	445	358	32	33
Seven Islands Agency—																		
Montagnais of Seven Islands	50					510			45	43	46	44	40	39	119	122	4	8
Timiskaming Agency—																		
[1]Abitibi (Ontario)																		
Abitibi (Quebec)	134					134			17	14	8	6	10	10	26	30	5	8
[1]Argonaut and Larder Lake																		
Brennan Lake	63					63			9	12	13	10	3	3	6	6		1
Dumoine Lake	9					9			1		1	1	1	2	1	2		
Grand Lake Victoria	85					85			10	5	13	9	8	5	18	11	3	3
Hunter's Point	79				31	48			8	9	9	13	5	6	12	11	2	4
Kipawa	72	1				71			10	8	11	8	2	7	11	15		
Lac Barrier	118					118			13	17	11	14	6	6	24	19	4	4
Long Point	131					131			10	15	16	12	9	10	25	26	3	5
Simon Lake	146	5				141			13	14	13	19	12	6	33	28	3	5
Timiskaming	182					182			16	14	26	16	4	12	54	30	5	5
Wolf Lake	45					45			3	5	5	6	2	3	6	8	2	5
Total	1,064	6			31	1,027			110	113	126	114	62	70	216	186	27	40
Northern District—																		
Mistassini Lake	281	281																
Waswanipi	177																	
Total	458	281																
Upper St. Maurice District—																		
Manawan	132					132			21	19	21	8	9	4	25	23	2	
Obidjuan	203					203			33	24	15	27	12	6	37	35	9	5
*Upper St. Maurice	154					154												
Weymontache	109					109			14	15	15	15	5		21	22	1	1
Total	598					598			68	58	51	50	26	10	83	80	12	6
Hudson Bay (Eastern District)—																		
East Main (James Bay)	251																	
Fort George (James Bay)	479																	
Great Whale River	100																	
Namiska (James Bay)	152																	
Neoskwaskou Post (James Bay)	140																	
Ruperts House (James Bay)	262																	
Total	1,384																	

(1) Q. V. Ontario as to population.

TABLE No. 1.—CENSUS OF INDIANS ARRANGED UNDER PROVINCES AND AGENCIES, 1929—*Continued*

Agency and Band	Number in Band	Religions							Under 6 years		From 6 to 15 inclusive		From 16 to 20 inclusive		From 21 to 65 inclusive		From 65 years upwards	
		Anglican	Baptist	United Church	Presbyterian	Roman Catholic	Other Christian Beliefs	Aboriginal Beliefs	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
QUEBEC—*Concluded*																		
*Ungava—																		
Fort Chimo (Ungava Bay)	213																	
Georges River (Ungava Bay)	36																	
Port Burwell (Ungava Bay)	152																	
Whale River (Ungava Bay)	57																	
Total	458																	
Total, *Quebec	12,885	385		631	31	9,750	57	12	832	866	1,077	1,104	580	546	2,293	2,293	288	266

*No details of religions of 2,019 Indians available.
*No details of ages of 2,740 Indians available.

TABLE No. 1.—CENSUS OF INDIANS ARRANGED UNDER PROVINCES AND AGENCIES, 1929

Agency and Band	Number in Band	Religions							Under 6 years		From 6 to 15 inclusive		From 16 to 20 inclusive		From 21 to 65 inclusive		From 65 years upwards	
		Anglican	Baptist	United Church	Presbyterian	Roman Catholic	Other Christian Beliefs	Aboriginal Beliefs	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
SASKATCHEWAN																		
Assiniboine Agency—																		
Carry-the-kettle	217	.....	.....	.....	115	91	.....	11	20	26	20	33	7	6	49	33	12	11
Battleford Agency—																		
Grizzly Bear Head	38	18	.....	.....	.....	20	.....	.....	3	9	4	3	.....	1	7	7	2	2
Lean Man	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
Little Pine	157	129	.....	.....	.....	28	.....	.....	15	12	27	12	12	3	33	33	5	5
Luckyman	11	11	.....	.....	.....	.....	.....	.....	1	2	3	.....	1	.....	2	2	.....	.....
Meadow Lake	96	.....	.....	.....	.....	96	.....	.....	7	9	15	8	6	2	21	27	.....	1
Moosomin	148	27	.....	.....	.....	121	.....	.....	9	16	16	22	6	6	29	36	3	5
Mosquito	70	41	.....	.....	.....	29	.....	.....	5	8	4	6	4	.....	18	20	2	3
Poundmaker	158	10	.....	.....	.....	148	.....	.....	14	21	18	14	7	3	33	31	9	8
Red Pheasant	190	101	.....	.....	.....	89	.....	.....	16	19	29	25	7	9	38	39	1	7
Saulteaux	98	.....	.....	.....	.....	35	.....	63	9	11	12	11	4	3	22	25	1	.....
Sweet Grass	147	62	.....	.....	.....	80	.....	5	23	13	16	9	8	4	32	30	3	9
Thunderchild	177	93	.....	.....	.....	83	.....	1	22	18	20	13	6	4	42	48	2	2
Water Hen Lake	107	1	.....	.....	.....	88	.....	18	15	17	12	7	6	3	23	23	1	.....
Total	1,398	494	.....	.....	.....	817	.....	87	139	155	176	130	67	38	300	321	30	42
Carlton Agency—																		
Big River	201	40	.....	.....	1	121	.....	39	19	24	26	23	11	13	38	40	3	4
Mistawasis	186	30	.....	.....	93	63	.....	.....	19	18	17	20	11	3	45	46	4	3
Montreal Lake	317	315	.....	.....	.....	2	.....	.....	27	31	38	39	13	23	60	68	7	11
Muskeg Lake (Petaquakey)	176	.....	.....	.....	.....	176	.....	.....	13	21	13	20	10	13	39	40	3	4
Pelican Lake	29	.....	.....	.....	.....	10	.....	19	5	1	3	.....	.....	.....	5	11	1	3
Sandy Lake (Ahtahkakoops)	249	236	.....	.....	1	12	.....	.....	24	22	24	17	12	16	48	69	7	10
Sturgeon Lake	194	119	.....	.....	.....	69	.....	6	19	31	13	15	14	9	40	47	1	5
Wahpaton	45	2	.....	43	.....	.....	.....	.....	3	2	3	1	.....	4	14	11	3	4
Total	1,397	742	.....	43	95	453	.....	64	129	150	137	135	71	81	289	332	29	44
Crooked Lakes Agency—																		
Cowessess	276	.....	.....	.....	28	246	.....	2	19	30	34	38	16	9	58	63	4	5
Kahkewistahaw	138	.....	.....	.....	113	17	.....	8	18	15	13	20	6	4	26	31	4	1
Ochapowace	134	1	.....	.....	72	28	.....	33	15	15	8	14	6	3	29	27	9	8
Sakimay	165	.....	.....	.....	72	67	.....	26	13	18	16	15	4	6	34	35	8	16
Total	713	1	.....	.....	285	358	.....	69	65	78	71	87	32	22	147	156	25	30

TABLE No. 1.—CENSUS OF INDIANS ARRANGED UNDER PROVINCES AND AGENCIES, 1929—*Continued*

Agency and Band	Number in Band	Religions							Under 6 years		From 6 to 15 inclusive		From 16 to 20 inclusive		From 21 to 65 inclusive		From 65 years upwards	
		Anglican	Baptist	United Church	Presbyterian	Roman Catholic	Other Christian Beliefs	Aboriginal Beliefs	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
SASKATCHEWAN—*Concluded*																		
Duck Lake Agency—																		
Beardy's and Okemasis	206	1			5	200			26	17	20	19	12	9	40	46	9	8
James Smith's	287	286				1			30	29	28	26	15	17	60	60	10	12
John Smith's	155	155							9	10	10	16	12	6	40	41	5	6
Kinistino	87	1						86	8	10	8	9	7	2	16	19	4	4
One Arrows	123					123			12	13	8	8	7	6	33	28	3	5
Total	858	443			5	324		86	85	79	74	78	53	40	189	194	31	35
File Hills Agency—																		
File Hills Colony	239	27			60	152			29	26	36	18	18	21	48	41	1	1
Little Black Bear	40				4	23		13	4	1		4	1	3	9	8	4	6
Okanese	31				8	11		12	2	2	2	3			6	9	4	3
Peepeekeesis	45				27	5		13	2	8	2	9			6	6	6	6
Star Blanket	58				21	26		11	5	5	2	8	4	5	12	14		3
Total	413	27			120	217		49	42	42	42	42	23	29	81	78	15	19
Isle a la Crosse Agency—																		
Amos Charles	257	257							24	21	38	40	17	17	44	48	3	5
Barren Lands	154					154			12	12	21	22	10	10	28	34	1	4
Canoe Lake	115					115			8	10	14	19	6	9	18	27	1	3
Clear Lake	203					203			14	14	23	27	10	10	40	57	2	6
English River	202					202			16	15	25	25	12	11	37	53	2	6
James Roberts	414	398				16			36	34	58	66	26	25	66	89	4	10
Lac La Hache	107					107			6	7	10	14	5	6	24	31	1	3
Matthias Colomb	340					340			29	24	49	45	20	19	65	77	4	8
Peter Ballantyne	448	150				298			42	31	69	60	28	25	83	95	5	10
Portage La Loche	69					69			6	5	11	11	4	5	12	14		1
Total	2,309	805				1,504			193	173	318	329	138	137	417	525	23	56
Moose Mountain Agency—																		
White Bear	248			54		59		135	18	26	36	26	16	10	48	48	8	12
Moose Woods Reserve—																		
White Cap Sioux	66			66					7	3	6	6	3	8	14	13	2	4

Onion Lake Agency—																	
[1] Chipewyan, Cold Lake																	
[1] Frog Lake																	
Island Lake	87	19				52		16	3	2	10	9	9	5	22	21	6	
Joe Bighead's	105	4				53		48	5	7	12	14	3	4	29	25	2	4
[1] Keeheewin's																		
Loon Lake	28					3		25	1	1	5	1	2	2	8	6	2	
Onion Lake	254	84				170			15	16	32	33	15	13	63	53	6	8
Total	474	107				278		89	24	26	59	57	29	24	122	105	16	12
Pas Agency—																		
Cumberland	123	103				20			10	8	14	14	6	6	28	32	2	3
Red Earth	144	144							14	8	19	13	8	5	32	39	2	4
Shoal Lake	77	77							6	5	9	9	4	3	19	20	1	1
Total	344	324				20			30	21	42	36	18	14	79	91	5	8
Pelly Agency—																		
Cote	318	1			200	64		53	26	31	52	42	13	10	70	65	4	5
Keeseekoouse	172				31	133		8	19	13	34	22	7	4	31	36	2	4
Key	80	57				17		6	7	8	12	8	2	1	20	19		3
[2] Valley River																		
Total	570	58			231	214		67	52	52	98	72	22	15	121	120	6	12
Qu'Appelle Agency—																		
Muscowpetung	127				49	62		16	12	9	9	17	6	9	25	23	9	8
Pasqua	157				26	131			17	17	13	18	4	9	31	36	5	7
Piapot	184	3			11	144		26	13	16	18	16	12	13	37	35	10	14
Standing Buffalo	166					166			17	14	19	14	12	6	40	31	6	7
Total	634	3			86	503		42	59	56	59	65	34	37	133	125	30	36
Touchwood Agency—																		
Day Star	86	69				2		15	2	11	13	13	7	4	10	11	7	8
Fishing Lake	156	130				8		18	16	17	13	12	13	14	31	31	4	5
George Gordon	243	217				20		6	23	24	25	23	15	18	51	54	4	6
Muscowequan	158					153		5	8	24	16	15	7	7	33	39	4	5
Nut Lake	268	3						265	27	32	24	32	16	15	52	60	3	7
Poorman	190	20				158		12	21	25	18	18	5	4	44	49	3	3
Total	1,101	439				341		321	97	133	109	113	63	62	221	244	25	34
Wood Mountain Reserve—																		
Moose Jaw Sioux	42					42			2	4		5		1	13	9	3	5
Total, Saskatchewan	10,784	3,443		163	937	5,221		1,020	962	1,024	1,247	1,214	576	524	2,223	2,394	260	360

[1] Q.V. Alberta as to population.
[2] Q.V. Manitoba as to population.

TABLE No. 1.—CENSUS OF INDIANS ARRANGED UNDER PROVINCES AND AGENCIES, 1929

Agency and Band	Number in Band	Religions							Under 6 years		From 6 to 15 inclusive		From 16 to 20 inclusive		From 21 to 65 inclusive		From 65 year upwards	
		Anglican	Baptist	United Church	Presbyterian	Roman Catholic	Other Christian Beliefs	Aboriginal Beliefs	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
YUKON TERRITORY																		
Yukon Agency—																		
Carcross	58	58	.....	.....	.....	.....	.....	.....	5	9	7	3	3	1	16	9	2	3
Carmacks	90	90	.....	.....	.....	.....	.....	.....	6	15	8	8	6	4	20	17	3	3
Champagne	130	130	.....	.....	.....	.....	.....	.....	13	15	11	5	5	5	33	28	8	7
Coffee Creek	127	127	.....	.....	.....	.....	.....	.....	15	23	12	17	10	12	8	14	10	6
Lancing Creek	41	.....	.....	.....	.....	41	.....	.....	2	1	7	7	2	4	12	6	.....	.....
*La Pierre's House	12	12	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Little Salmon	60	60	.....	.....	.....	.....	.....	.....	8	7	4	5	2	.....	15	15	2	2
Mayo	35	35	.....	.....	.....	.....	.....	.....	5	3	2	2	1	.....	11	9	.....	2
Moosehide	86	86	.....	.....	.....	.....	.....	.....	6	10	8	15	4	3	21	13	4	2
Old Crow	101	101	.....	.....	.....	.....	.....	.....	7	14	10	13	2	2	22	19	4	8
Rampart House	16	16	.....	.....	.....	.....	.....	.....	1	3	1	.....	.....	.....	5	6	.....	.....
Ross River	175	175	.....	.....	.....	.....	.....	.....	10	6	25	10	12	15	40	52	4	1
Selkirk	123	123	.....	.....	.....	.....	.....	.....	15	13	11	19	8	4	22	20	6	5
*Teslin Lake	108	108	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Twelve Mile	21	21	.....	.....	.....	.....	.....	.....	3	3	3	4	.....	1	2	3	1	1
Whitehorse	81	81	.....	.....	.....	.....	.....	.....	5	12	7	5	8	8	12	15	4	5
Total*	1,264	1,223	.....	.....	.....	41	.....	.....	101	134	116	113	63	59	239	226	48	45

*No details of ages of 120 Indians available.

RECAPITULATION.—CENSUS OF INDIANS ARRANGED UNDER PROVINCES, 1929

Agency and Band	Number in Band	Religions							Under 6 years		From 6 to 15 inclusive		From 16 to 20 inclusive		From 21 to 65 inclusive		From 65 years upwards	
		Anglican	Baptist	United Church	Presbyterian	Roman Catholic	Other Christian Beliefs	Aboriginal Beliefs	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
PROVINCES																		
Alberta	9,846	1,636	.....	1,281	.....	6,513	136	280	864	928	1,054	1,056	645	565	2,120	2,052	257	305
*British Columbia	25,107	4,435	.....	3,532	714	12,879	648	399	1,676	1,791	2,498	2,544	1,287	1,224	5,177	4,890	763	757
Manitoba	12,263	4,393	67	3,296	869	3,121	250	267	1,109	1,043	1,458	1,365	715	627	2,410	2,522	476	538
New Brunswick	1,604	.....	.....	.....	.....	1,604	.....	.....	112	130	191	189	99	95	367	327	45	49
*Northwest Territories	4,615	603	.....	.....	.....	3,229	.....	174	378	371	515	468	252	210	798	931	36	47
Nova Scotia	1,929	.....	15	1	.....	1,912	1	.....	173	145	232	215	102	124	458	355	67	58
*Ontario	27,420	6,915	1,038	5,252	111	8,269	594	2,782	1,769	1,638	2,292	2,186	1,628	1,559	5,302	5,202	920	863
Prince Edward Island	295	.....	.....	.....	.....	295	.....	.....	22	26	32	24	24	27	60	57	13	10
*Quebec	12,885	385	.....	631	31	9,750	57	12	832	866	1,077	1,104	580	546	2,293	2,293	288	266
Saskatchewan	10,784	3,443	.....	163	937	5,221	.....	1,020	962	1,024	1,247	1,214	576	524	2,223	2,394	260	360
*Yukon	1,264	1,223	.....	.....	.....	41	.....	.....	101	134	116	113	63	59	239	226	48	45
Total Indian Population	108,012	23,033	1,120	14,156	2,662	52,834	1,686	4,934	7,998	8,096	10,712	10,478	5,971	5,560	21,447	21,249	3,173	3,298

*No details as to religions of 7,587 Indians available.
*No details as to ages of 10,030 Indians available.

TABLE No. 2—GRAIN, VEGETABLE AND ROOT PRODUCTION

Agencies	Wheat		Oats		Other Grains		Peas, Beans, Etc.		Potatoes		Other Roots		Fodder Tons		
	Acres Sown	Bushels Harvested	Acres Sown	Bushels Harvested	Acres Sown	Bushels Harvested	Acres Sown	Bushels Harvested	Acres Sown	Bushels Harvested	Acres Sown	Bushels Harvested	Hay Cultivated	Hay Wild	Other Fodder
ALBERTA															
Blackfoot	6,048	82,465	1,260	29,435	22	354	.....	.....	13	1,114	.....	.....	.....	949	1,202
Blood	7,454	139,107	326	7,002	.....	.....	.....	.....	15	600	10	350	.....	2,500	1,132
Edmonton	1,099	26,470	1,593	36,267	558	17,436	.....	.....	10	522	9	404	.....	1,605	1,017
Hobbema	1,773	29,567	2,259	49,633	738	9,630	.....	.....	33	1,353	27	157	191	4,170	14,376
Lesser Slave Lake	33	650	798	6,400	.....	.....	.....	.....	80	7,305	2	200	.....	2,541	849
Peigan	1,983	31,315	266	816	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,110	200
Saddle Lake	750	13,747	922	21,883	5	71	.....	.....	12	1,265	11	372	.....	3,435	258
Sarcee	92	2,005	210	5,972	180	5,420	.....	.....	6	300	2	50	.....	425	.....
Stony	.....	.....	.....	.....	.....	.....	.....	.....	12	50	11	150	250	1,085	.....
Total	19,232	325,326	7,634	157,408	1,503	32,911	.....	.....	181	12,509	72	1,683	441	17,820	18,034
BRITISH COLUMBIA															
Babine	.....	.....	78	227	.....	.....	.....	.....	100	13,950	53	8,260	1,067	532	227
Bella Coola	.....	.....	.....	.....	.....	.....	.....	.....	18	1,525	1	100	35	610	.....
Cowichan	53	1,660	425	17,010	.....	.....	.....	.....	271	6,545	.....	.....	1,527	.....	.....
Kamloops	239	3,375	250	3,640	45	.....	31	40	237	1,641	30	285	2,032	326	303
Kootenay	27	530	616	.....	15	200	6	.....	27	4,675	7	390	1,125	690	31
Kwawkewlth	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Lytton	114	2,610	161	4,355	23	500	224	4,190	202	41,610	18	415	1,097	1	.....
New Westminster	24	576	325	16,715	22	655	79	2,396	180	14,025	48	4,750	614	273	.....
Nicola	142	1,870	535	9,620	12	174	7	30	283	2,613	63	2,070	3,560	630	.....
Okanagan	1,150	27,150	505	8,100	120	2,150	130	2,600	255	23,800	155	20,500	2,290	1,350	190
Queen Charlotte	.....	.....	.....	.....	.....	.....	.....	.....	11	270	1	5	2	.....	.....
Skeena River	.....	.....	3	.....	.....	.....	6	495	190	18,600	15	1,315	16	48	.....
Stikine	.....	.....	.....	.....	.....	.....	.....	.....	2	45	.....	.....	.....	82	.....
Stuart Lake	13	140	298	2,500	16	125	.....	.....	47	2,365	22	1,218	288	1,065	248
Vancouver	.....	.....	.....	.....	12	500	31	1,270	48	6,050	5	500	85	85	.....
West Coast	.....	.....	6	.....	16	.....	5	153	6	344	4	157	14	39	.....
Williams Lake	117	2,025	318	7,920	.....	.....	.....	.....	278	11,415	69	.....	1,680	4,625	6
Total	1,879	39,936	3,520	70,087	281	4,304	519	11,174	2,155	149,473	491	39,965	15,432	10,356	1,005
MANITOBA															
Birtle	318	4,154	628	13,597	371	6,727	.....	.....	15	3,025	.....	.....	.....	2,074	156
Clandeboye	417	4,960	284	5,510	227	2,000	.....	.....	90	10,175	17	1,250	.....	1,675	31
Fisher River	.....	.....	158	4,503	2	42	.....	.....	17	3,045	7	317	38	3,719	.....
Griswold	694	9,861	476	11,822	1,237	22,070	.....	.....	15	1,269	6	300	.....	1,364	52
Manitowapah	8	120	35	147	15	.....	.....	.....	91	6,436	.....	249	20	6,983	26
Norway House	.....	.....	.....	.....	.....	.....	.....	.....	71	3,100	1	65	.....	222	.....
Pas	.....	.....	.....	.....	.....	.....	.....	.....	52	1,775	.....	.....	.....	2,255	.....
Portage la Prairie	585	10,296	651	17,954	1,202	23,292	.....	.....	.....	.....	.....	.....	.....	469	90
Total	2,022	29,391	2,232	53,533	3,054	54,131	.....	.....	351	28,825	31	2,181	58	18,761	355

New Brunswick														
Northern Division			21	350	4	20	1	4	8½	850	2½	78	4	
Northeastern Division	5	40	91	1,425	14	165	6	58	54	2,900	12	1,450	112	25	8
Southwestern Division			2	50	1	30	1	40	8	545	1	25	8		
Total	5	40	114	1,825	19	215	8	102	70½	4,295	15½	1,553	124	25	8
Northwest Territories															
Fort Resolution									½	15					
Nova Scotia															
Annapolis							1	15	3	400	1	30	3		
Antigonish and Guysboro			4	66			2	36	7	320	2	68	40	14	3
Cape Breton (Eskasoni)			5	45	4	30	2	55	12	375	1	25	60	25	10
Cape Breton (Sydney)															
Colchester			1				½		3	300	½	10	6		
Cumberland			1½	25	½	16	½		½	70			4	3	
Digby									2	60					
Halifax			10	375	2	20	1	4	12	350	3	175	30	15	5
Hants (Indian Brook)			2	10			½		3	99	½	25	23	2	
Hants (Windsor)							1	10	2	60	1	10	10		
Inverness			2	45			½	4	12	800	½	50	22	66	8
Kings							½	2	1	60	½	30	3	4	
Lunenburg							1½	10	6	200	8	90	20	22	
Pictou			1	13			½	3½	5	305	¼	13		2	
Queens							½	4	½	10			5		
Richmond			34	425			2	38	12	450	1	35	43	3	
Shelburne							½	1	½	103	¼	63	5		
Victoria			2	35	½	1	½	1½	14	280	¼	5	80	18	
Yarmouth															
Total			62½	1,039	6½	67	13½	224	95½	4,242	19½	629	354	174	26
Ontario															
Alnwick	14	260	175	4,300	26	350			13	1,100	5	1,600	130		5
Cape Croker	18	216	190	2,160	24	480	32	424	22	1,460	8	240	400	72	4
Caradoc	315	7,875	1,600	39,950	845	25,350	185	4,625	750	30,000	455	15,925	4,425	60	1,825
Chapleau					9	595									
Christian Island	9	120	80	1,200	4	60	25	230	50	1,400	9	300	100	7	
Fort Frances	9	240	85	2,120	10	200		27	20	875	3	105	970	98	
Fort William									62	2,329			25	12	
Georgina Island	15	160	55	600	5	70			5	160			50	20	
Golden Lake	4	30	20	200					4	200			10	20	
Gore Bay	11	210	146	5,560	30	600	41	740	77	3,165	9	525	308	15	128
Kenora									67	4,900	14	300	24	310	
Manitowaning	203	1,385	591	12,120	116	1,645	133	1,098	515	18,400	107	1,285	4,467	65	295
Moravian	110	1,000	185	2,090	200	2,400	20	250	25	680	10	200	175	35	200
New Credit	80	1,450	650	6,084	150	1,460	5	65	13	335	2	35	550		85
Parry Sound			62	1,215	19	140	6	170	38	685	9	315	380	12	
Rama	11	285	44	1,420	5	110	5	125	25	500	1	75	135	15	5
Rice Lake	55	1,150	200	6,000	50	1,350	16	305	42	4,000	30	4,200	195	10	41

TABLE No. 2—GRAIN, VEGETABLE AND ROOT PRODUCTION—*Concluded*

Agencies	Wheat		Oats		Other Grains		Peas, Beans, Etc.		Potatoes		Other Roots		Fodder Tons		
	Acres Sown	Bushels Harvested	Acres Sown	Bushels Harvested	Acres Sown	Bushels Harvested	Acres Sown	Bushels Harvested	Acres Sown	Bushels Harvested	Acres Sown	Bushels Harvested	Hay Cultivated	Hay Wild	Other Fodder
ONTARIO—*Concluded*															
Sarnia	75	1,350	230	5,750	40	400	12	96	50	3,300	10	460	86	.....	45
Saugeen	10	125	257	8,995	80	1,200	15	400	62	1,240	21	280	160	10	128
Sault Ste. Marie	6	40	110	2,600	.....	.....	25	285	130	5,250	17	600	115	140	.....
Savanne	.....	.....	.....	.....	.....	.....	.....	.....	34	2,250	13	245	5	16	.....
Scugog	.....	.....	.....	.....	.....	.....	.....	.....	3	150	.....	.....	.....	.....	.....
Six Nations	990	10,800	6,540	175,200	1,450	28,500	55	1,150	96	2,840	480	8,400	2,480	.....	8,400
Sturgeon Falls	.....	.....	40	400	16	480	8	200	22	2,200	9	240	30	25	.....
Thessalon	.....	.....	82	581	.....	.....	29	290	105	3,140	6	260	135	58	.....
Tyendinaga	70	1,400	1,550	46,500	1,000	25,000	60	1,200	40	1,800	4	600	4,200	10	4,000
Walpole Island	195	1,925	900	2,700	85	1,870	43	344	135	9,450	30	1,200	40	300	.....
Total	2,200	30,021	13,792	327,745	4,164	92,260	715	12,024	2,405	101,809	1,252	37,390	19,595	1,310	15,161
PRINCE EDWARD ISLAND	18	216	55	1,100	.....	.....	.....	.....	20	1,020	1	100	80	25	.....
QUEBEC															
Bécancour	.....	.....	10	70	.....	.....	.....	.....	1	60	1	30	.....	3	.....
Bersimis	1	8	8	48	2	10	2	12	9	395	1	5	85	.....	.....
Cacouna	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Caughnawaga	8	80	600	10,000	150	2,500	10	75	500	7,500	15	400	1,000	.....	.....
Jeune Lorette	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Maniwaki	.....	.....	159	2,490	6	51	.....	.....	30	2,370	7	1,058	323	21	43
Maria	3	35	28	500	8	120	.....	.....	6	300	1	20	5	.....	.....
Mingan	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Oka	25	300	125	3,000	50	500	15	400	30	500	.....	.....	300	20	175
Pierreville	.....	.....	30	300	10	160	3	20	55	275	.....	.....	50	75	.....
Pointe Bleue	9	95	177	1,770	59	590	1	15	40	1,000	20	200	150	.....	15
Restigouche	.....	.....	190	1,900	4	50	.....	.....	60	2,500	.....	.....	10	35	.....
Seven Islands	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
St. Regis	140	1,400	390	6,000	60	500	75	800	350	7,000	25	1,200	400	450	700
Timiskaming	12	50	100	300	.....	.....	.....	.....	12	400	1	75	120	.....	20
Total	198	1,968	1,807	16,378	349	4,481	106	1,322	1,093	22,300	71	2,988	2,443	604	953
SASKATCHEWAN															
Assiniboine	364	5,548	166	5,789	149	4,345	.....	.....	4	235	2	52	.....	993	264
Battleford	2,520	24,283	1,489	17,613	.....	.....	.....	.....	37	1,481	22	699	.....	2,690	622
Carlton	2,735	35,767	1,275	24,486	184	2,351	.....	.....	24	1,086	11	263	4,271	.....	.....
Crooked Lakes	764	11,850	1,057	22,827	696	14,865	.....	.....	23	844	13	345	.....	2,828	279
Duck Lake	1,833	26,620	1,000	18,380	200	2,550	.....	.....	15	1,400	8	400	.....	4,100	280
File Hills Agency	1,088	14,831	1,115	16,916	625	14,049	.....	.....	8	687	1	40	.....	998	450

Isle a la Crosse									12	1,200				440	
Moose Mountain	205	2,151	146	2,148	83	2,081				345		125		502	37
Moose Woods	63	360	57	130					3	150	1	50		1,000	80
Onion Lake	1,011	13,396	1,508	23,542					25	2,220	1	150		3,683	469
Pelly	791	15,219	929	27,208	226	4,858			45	650				2,040	103
Qu'Appelle	3,096	58,609	1,237	24,595	124	2,736			22	1,822	9	162		2,074	522
Touchwood	1,662	20,255	818	15,399	37	889			35	1,380	14	445		2,848	677
Wood Mountain Reserve	84	390	40		50				1	25				77	
Total	16,216	229,279	10,837	199,033	2,374	48,724			254	13,519	82	2,731	4,271	24,273	3,783
YUKON TERRITORY															
Yukon										*100		*50			

* School Garden.

RECAPITULATION

Alberta	19,232	325,326	7,634	157,408	1,503	32,911			181	12,509	72	1,683	441	17,820	18,034
British Columbia	1,879	39,936	3,520	70,087	281	4,304	519	11,174	2,155	149,473	491	39,965	15,432	10,356	1,005
Manitoba	2,022	29,391	2,232	53,533	3,054	54,131			351	28,825	31	2,181	58	18,761	355
New Brunswick	5	40	114	1,825	19	215	8	102	70½	4,295	15½	1,553	124	25	8
Northwest Territories									½	15					
Nova Scotia			62½	1,039	6¼	67	13¼	224	95½	4,242	19½	629	354	174	26
Ontario	2,200	30,021	13,792	327,745	4,164	92,260	715	12,024	2,405	101,809	1,252	37,390	19,595	1,310	15,161
Prince Edward Island	18	216	55	1,100					20	1,020	1	100	80	25	
Quebec	198	1,968	1,807	16,378	349	4,481	106	1,322	1,093	22,300	71	2,988	2,443	604	952
Saskatchewan	16,216	229,279	10,837	199,033	2,374	48,724			254	13,519	82	2,731	4,271	24,273	3,783
Yukon Territory										100		50			
Total	41,770	656,177	40,053½	828,148	11,750¾	237,093	1,361½	24,846	6,625½	338,107	2,035	89,270	42,798	73,348	39,325

TABLE No. 3—LAND: PRIVATE AND PUBLIC BUILDINGS AND PROPERTY

Agencies	Total Area of Reserve (Acres)	Acres under Wood	Acres Cleared but not Cultivated	Acres under Actual Cultivation	Acres Fenced	Private Property								Public Property					
						Stone, Brick and Frame Dwellings	Other Dwellings	Outbuildings, etc.	Ploughs, Harrows, Drills, etc.	Mowers, Reapers, Binders, Threshers, etc.	Carts, Wagons and Vehicles	Automobiles	Tools and small Implements	Churches	Council Houses	School Houses	Saw Mills	Other Buildings	Engines and Machinery
ALBERTA																			
Blackfoot	174,785	2,598	143,187	29,000	68,396	158	92	630	570	320	350	26	650	2	.....	1	.....	22	196
Blood	354,086	4,700	329,411	19,975	81,000	94	322	527	440	262	550	10	2,950	.....	2	2	.....	64	70
Edmonton	70,940	31,530	35,127	4,283	39,521	32	134	209	278	202	236	12	1,197	.....	.....	1	.....	9	9
Hobbema	76,868	50,375	19,305	7,188	31,277	4	196	306	414	268	895	7	2,610	.....	.....	.....	.....	.....	.....
Lesser Slave Lake	246,241	147,784	97,710	747	1,330	.....	268	391	105	96	222	.....	1,048	2	.....	.....	.....	.....	.....
Peigan	100,353	7,911	87,514	4,928	154,550	24	80	92	175	136	237	2	1,040	.....	1	2	.....	13	48
Saddle Lake	88,736	25,425	60,916	2,395	9,049	4	169	206	182	138	266	4	887	.....	.....	.....	.....	.....	2
Sarcee	62,838	35,000	26,680	1,158	62,838	39	3	36	40	46	90	.....	400	2	1	1	.....	2	6
Stony	88,258	40,000	48,088	170	13,000	10	134	92	52	84	255	.....	.....	.....	3	.....	.....	.....	.....
Total	1,263,105	345,323	847,938	69,844	460,961	365	1,398	2,489	2,256	1,552	3,101	61	10,782	6	7	7	.....	110	331
BRITISH COLUMBIA																			
Babine	33,379	19,758	9,800	3,821	3,056	337	323	421	164	64	282	17	5,140	11	10	3	2	1	0
Bella Coola	19,135	18,514	573	48	1,212	222	155	375	30	13	40	10	1,420	5	6	5	.....	10	4
Cowichan	19,878	10,565	5,577	3,736	5,617	669	30	286	306	79	262	113	5,252	2	.....	7	.....	.....	.....
Kamloops	87,877	50,415	35,398	2,064	71,070	97	196	376	443	165	281	20	799	9	4	1	.....	.....	3
Kootenay	42,316	16,800	23,937	1,579	2,332	52	146	191	244	75	211	33	355	5	.....	.....	.....	.....	.....
Kwawkewlth	16,305	15,861	421	23	39	210	88	.....	.....	.....	.....	8	2,160	.....	.....	6	.....	2	5
Lytton	51,382	31,250	16,709	3,423	5,514	448	208	305	476	114	370	61	2,956	33	4	3	1	.....	5
New Westminster	23,976	17,590	4,755	1,631	7,776	196	146	116	78	70	89	51	1,377	16	4	3	.....	2	.....
Nicola	83,116	42,906	38,393	1,817	51,800	150	152	316	591	185	267	25	1,000	7	1	1	.....	.....	7
Okanagan	146,078	75,350	65,428	5,300	61,500	224	150	595	580	106	535	103	2,075	10	3	3	14	27	.....
Queen Charlotte	3,484	2,156	1,315	13	19	134	101	101	2	.....	16	8	700	2	2	3	1	1	1
Skeena River	71,642	70,870	559	213	158	496	136	238	5	1	4	.....	760	10	4	8	3	21	9
Stikine	415	15	399	1	.....	10	112	.....	.....	.....	7	.....	2,304	.....	.....	.....	.....	.....	.....
Stuart Lake	34,594	29,359	4,273	962	7,534	43	267	310	86	61	175	9	2,710	16	1	.....	.....	6	93
Vancouver	17,553	16,231	848	474	417	305	107	155	16	.....	21	23	1,050	7	4	4	.....	4	.....
West Coast	12,131	11,665	417	49	128	422	216	4	3	1	5	8	238	1	.....	.....	3	.....	.....
Williams Lake	76,986	30,391	45,113	1,482	40,578	18	440	283	201	205	250	31	1,555	13	4	.....	1	2	3
Total	740,247	459,696	253,915	26,636	258,750	4,033	2,973	4,072	3,225	1,139	2,815	520	31,851	147	47	47	25	76	130
MANITOBA																			
Birtle	53,622	30,981	18,635	4,006	11,665	23	160	297	233	142	376	.....	2,408	4	.....	.....	.....	1	6
Clandeboye	75,241	58,160	15,075	2,006	6,545	6	548	199	101	35	70	5	448	13	.....	17	.....	11	.....
Fisher River	94,844	93,507	961	376	3,625	2	263	355	156	155	141	4	1,038	5	1	5	1	14	2
Griswold	11,813	1,079	7,349	3,385	1,752	36	53	141	176	102	267	6	620	1	1	.....	.....	5	.....

Manitowapah	94,477	46,194	47,921	362	1,104	11	364	386	86	175	324	.....	2,020	11	.....	9	.....	24	1
Norway House	66,513	55,833	10,607	73	71	6	465	95	8	1	12	.....	440	1	2	5	.....	.....	.....
Pas	60,743	50,020	10,671	52	1,405	49	441	192	31	21	36	.....	400	13	2	11	1	10	.....
Portage la Prairie	14,417	2,700	7,309	4,408	2,075	14	83	120	63	52	118	8	300	1	.....	1	.....	10	4
Total	471,670	338,474	118,528	14,668	28,242	147	2,377	1,785	854	683	1,344	23	7,674	49	6	48	2	75	13
New Brunswick																			
Northern Division	6,506	6,066	228	212	230	59	.....	22	10	3	13	7	55	1	1	2	.....	1	1
Northeastern Division	26,952	26,039	731	182	913	228	37	136	66	22	82	.....	570	5	1	5	.....	9	.....
Southwestern Division	1,110	1,017	77	16	72	64	.....	26	4	.....	5	.....	350	.....	2	4	.....	.....	.....
Total	34,568	33,122	1,036	410	1,215	351	37	194	80	25	100	7	975	6	4	11	.....	10	1
Northwest Territories																			
Fort Resolution	.....	.....	.....	.....	.....	.....	198	88	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Nova Scotia																			
Annapolis	55	50	.....	5	.....	15	.....	6	.....	.....	.....	3	.....	.....	.....	.....	.....	.....	1
Antigonish and Guysboro	634	309	240	85	200	37	12	8	4	.....	9	.....	70	1	.....	1	.....	.....	.....
Cape Breton (Eskasoni)	2,800	2,000	555	245	300	20	3	25	6	2	7	.....	40	1	.....	1	.....	2	.....
Cape Breton (Sydney)	69	24	42	3	69	26	.....	26	.....	.....	2	.....	65	1	.....	1	.....	.....	.....
Colchester	225	150	60	15	50	36	.....	10	5	2	10	2	100	1	.....	1	.....	1	.....
Cumberland	1,020	990	25	5	20	15	.....	2	2	.....	2	.....	.....	1	.....	.....	.....	.....	.....
Digby	1,600	1,200	350	50	100	19	.....	4	.....	.....	.....	.....	50	1	.....	1	.....	.....	.....
Halifax	221	96	97	28	221	23	5	.....	6	2	6	1	27	.....	.....	.....	.....	.....	.....
Hants (Indian Brook)	2,053	1,925	122	6	85	8	1	13	3	1	12	.....	100	1	.....	1	.....	1	.....
Hants (Windsor)	1,000	994	.....	6	.....	3	3	4	.....	.....	3	1	150	.....	.....	.....	.....	.....	.....
Inverness	2,757	2,350	331	76	519	43	9	7	20	4	20	.....	175	1	1	2	.....	2	.....
Kings	470	416	52	2	12	8	.....	2	.....	.....	.....	.....	25	.....	.....	.....	.....	.....	.....
Lunenburg	2,053	1,175	848	30	60	23	.....	20	3	1	6	.....	110	.....	.....	1	.....	.....	.....
Pictou	210	105	95	10	30	30	8	4	4	.....	9	4	165	2	.....	1	.....	1	.....
Queens	1,975	1,315	654	6	25	6	.....	9	.....	.....	2	.....	15	.....	.....	.....	.....	.....	.....
Richmond	1,281	850	230	201	225	30	10	18	20	2	30	.....	200	1	1	1	.....	3	2
Shelburne	.....	.....	.....	.....	2	8	.....	7	1	.....	3	4	.....	.....	.....	.....	.....	.....	.....
Victoria	796	510	226	60	50	23	1	9	8	2	12	.....	50	.....	.....	1	.....	1	.....
Yarmouth	22	20	2	.....	.....	3	1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....
Total	19,241	14,479	3,929	833	1,968	376	53	174	82	16	133	16	1,342	11	2	12	.....	11	3
Ontario																			
Alnwick	3,502	827	175	2,500	2,800	40	1	24	50	15	40	11	275	1	1	1	.....	2	1
Cape Croker	15,586	10,024	5,268	294	2,907	37	73	130	170	34	124	17	585	2	1	3	2	3	6
Caradoc	14,357	1,875	8,326	4,156	10,650	259	128	405	725	197	553	65	1,630	9	3	6	0	15	2
Chapleau	45,340	45,042	289	9	12	.....	.....	.....	.....	.....	.....	.....	250	3	.....	.....	.....	.....	.....
Christian Island	13,264	12,314	450	500	590	26	24	35	28	11	31	3	350	2	1	1	1	2	2
Fort Frances	70,598	68,998	676	924	1,354	55	116	36	31	10	30	5	805	.....	2	2	.....	3	7
Fort William	45,253	44,550	610	93	49	93	85	16	9	.....	5	2	379	7	2	8	.....	2	.....
Georgina Island	3,578	3,220	228	130	400	11	15	33	32	9	20	1	150	1	1	1	.....	.....	2
Golden Lake	1,560	1,240	270	50	300	4	28	14	10	2	9	6	200	1	.....	1	.....	.....	1
Gore Bay	14,995	12,309	1,749	937	1,896	15	117	305	110	29	141	20	570	4	1	4	.....	2	3
Kenora	135,285	134,507	647	131	335	.....	238	125	17	.....	110	.....	8,700	.....	5	3	.....	.....	.....
Manitowaning	179,685	146,774	27,368	5,543	11,525	63	514	1,345	509	278	829	27	4,060	11	2	8	.....	6	10
Moravian	3,028	770	1,458	800	2,500	37	36	100	100	25	80	20	115	2	1	1	.....	4	1
New Credit	6,000	65	1,900	4,035	6,000	69	2	100	145	40	135	10	500	1	1	1	.....	2	.....
Parry Sound	86,872	84,822	1,210	840	1,300	38	88	49	78	26	58	3	165	8	1	6	3	1	4
Rama	2,253	1,103	950	200	1,250	62	9	41	11	8	19	8	200	1	1	1	.....	9	.....
Rice Lake	3,524	1,675	1,199	650	2,150	64	13	74	81	37	73	20	210	2	2	2	.....	2	.....

TABLE No. 3—LAND: PRIVATE AND PUBLIC BUILDINGS AND PROPERTY—*Concluded*

Agencies	Total Area of Reserve (Acres)	Acres under Wood	Acres Cleared but not Cultivated	Acres under Actual Cultivation	Acres Fenced	Private Property								Public Property					
						Stone, Brick and Frame Dwellings	Other Dwellings	Outbuildings, etc.	Ploughs, Harrows, Drills, etc.	Mowers, Reapers, Binders, Threshers, etc.	Carts, Wagons and Vehicles	Automobiles	Tools and small Implements	Churches	Council Houses	School Houses	Saw Mills	Other Buildings	Engines and Machinery
ONTARIO—*Concluded*																			
Sarnia	9,731	5,521	3,793	417	6,035	75	30	205	165	85	195	15	755	4	2	3	.....	8	4
Saugeen	14,100	9,050	4,605	445	1,800	62	128	431	178	35	147	18	300	5	1	3	.....	5	.....
Sault Ste. Marie	39,249	36,325	2,466	458	1,516	53	93	140	75	13	174	2	1,350	5	1	4	2	.....	5
Savanne	126,166	125,538	561	67	.....	.....	187	44	8	.....	12	1	6,500	.....	1	1	.....	.....	.....
Scugog	800	50	241	509	800	8	.....	9	5	3	5	3	70	1	.....	.....	.....	.....	.....
Six Nations	38,947	6,520	5,411	27,016	38,947	550	218	1,679	2,340	490	1,644	35	9,940	15	1	11	.....	29	54
Sturgeon Falls	46,813	46,291	20	502	311	61	79	89	40	6	87	.....	500	4	.....	4	.....	.....	.....
Thessalon	61,320	59,768	740	812	809	44	72	132	22	9	40	5	1,010	4	.....	5	.....	.....	.....
Tyendinaga	17,604	7,121	2,643	7,840	13,720	237	1	556	450	230	450	50	825	2	1	4	.....	3	3
Walpole Island	40,480	35,862	3,230	1,388	8,200	139	88	290	275	105	305	30	285	2	2	2	1	3	4
Total	1,039,890	902,161	76,483	61,246	118,156	2,102	2,383	6,407	5,664	1,697	5,316	377	40,679	87	34	86	9	101	109
PRINCE EDWARD ISLAND	1,668	926	424	318	198	45	15	25	36	4	10	.....	410	1	1	1	.....	3	2
QUEBEC																			
Bécancour	122	52	8	62	86	4	.....	6	1	2	4	.....	7	.....	.....	.....	.....	.....	.....
Bersimis	63,197	61,530	1,581	86	70	.....	107	21	7	.....	25	1	365	1	.....	1	.....	1	1
Cacouna	400	400	.....	.....	.....	.....	1	2	.....	.....	.....	4	.....	.....	.....	.....	.....	.....	.....
Caughnawaga	12,327	800	6,500	5,027	5,200	565	.....	1,300	200	150	1,000	60	1,000	2	1	6	.....	3	4
Jeune Lorette	27	.....	27	.....	20	98	.....	22	.....	.....	45	11	260	1	1	1	.....	.....	13
Maniwaki	42,008	40,327	185	1,496	834	6	70	115	73	44	108	4	566	.....	1	2	.....	2	3
Maria	416	160	201	55	50	25	.....	22	6	3	8	1	80	1	.....	1	.....	.....	1
Mingan	.....	.....	.....	.....	.....	14	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....
Oka	18,500	16,000	1,600	900	1,500	100	.....	125	75	25	125	2	1,000	1	.....	2	.....	.....	8
Pierreville	579	.....	354	225	275	74	.....	50	15	7	14	2	225	2	1	2	.....	.....	.....
Pointe Bleue	3,779	1,971	500	1,308	1,400	78	19	149	55	45	185	6	400	2	.....	1	.....	2	10
Restigouche	8,856	8,426	128	302	430	102	5	192	32	5	88	4	280	1	1	1	1	5	3
Seven Islands	160	150	10	.....	10	60	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....
St. Regis	9,434	1,190	5,486	2,758	690	245	35	261	515	210	321	3	1,525	2	.....	6	.....	15	30
Timiskaming	34,136	31,540	2,246	350	420	16	30	48	19	4	26	3	300	.....	.....	1	.....	3	.....
Total	193,941	162,546	18,826	12,569	10,985	1,387	267	2,313	998	425	1,949	101	6,008	15	5	24	1	31	73
SASKATCHEWAN																			
Assiniboine	40,963	27,315	11,753	1,895	15,300	12	41	70	68	64	117	2	480	.....	2	1	.....	4	15
Battleford	206,487	39,851	161,267	5,369	53,846	1	400	433	393	348	446	4	2,595	1	7	1	1	4	7

Carlton	200,138	84,954	108,458	6,726	17,497	204	198	.....	174	141	206	7	743	6	.....	7	1	1	11
Crooked Lakes	102,397	38,008	60,675	3,714	19,700	7	160	316	279	213	278	3	1,915	1	.....	.....	.....	.....	.....
Duck Lake	124,181	27,100	92,981	4,100	10,450	8	188	425	327	178	321	1	640	3	2	3	.....	.....	7
File Hills Agency	72,046	24,000	43,306	4,740	14,400	29	47	153	158	75	180	1	775	3	.....	1	.....	.....	6
Isle à la Crosse	105,822	104,297	1,513	12	30	426	126	.....	.....	.....	4	.....	865	.....	.....	1	.....	.....	.....
Moose Mountain	30,040	24,995	3,974	1,071	30,040	1	54	80	89	55	121	.....	220	2	1	1	.....	2	1
Moose Woods	4,007	1,745	2,062	200	200	1	30	26	24	35	50	1	50	.....	.....	1	.....	.....	.....
Onion Lake	210,082	61,218	146,323	2,541	11,500	3	190	151	128	112	323	5	2,050	1	.....	1	2	.....	3
Pelly	57,762	20,166	34,334	3,262	7,480	9	118	182	100	90	157	1	795	3	.....	4	.....	2	25
Qu'Appelle	63,961	6,968	49,585	7,408	39,850	43	141	222	405	175	334	4	1,553	4	3	.....	.....	14	1
Touchwood	95,118	50,172	40,070	4,876	50,032	6	230	362	359	263	352	.....	1,340	3	1	4	.....	25	13
Wood Mountain Reserve	6,720	190	6,270	260	800	.....	13	15	10	14	20	1	140	.....	1	.....	.....	.....	.....
Total	1,319,724	510,979	762,571	46,174	271,225	750	1,936	2,435	2,514	1,763	2,909	30	14,161	27	17	25	4	52	89
YUKON TERRITORY																			
Yukon	3,734	3,681	.....	53	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	1	.....	.....	.....

RECAPITULATION

PROVINCES																			
Alberta	1,263,105	345,323	847,938	69,844	460,961	365	1,398	2,489	2,256	1,552	3,101	61	10,782	6	7	7	.....	110	331
British Columbia	740,247	459,696	253,915	26,636	258,750	4,033	2,973	4,072	3,225	1,139	2,815	520	31,851	147	47	47	25	76	130
Manitoba	471,670	338,474	118,528	14,668	28,242	147	2,377	1,785	854	683	1,344	23	7,674	49	6	48	2	75	13
New Brunswick	34,568	33,122	1,036	410	1,215	351	37	194	80	25	100	7	975	6	4	11	.....	10	1
Northwest Territories	.....	.....	.....	.....	.....	.....	198	88	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Nova Scotia	19,241	14,479	3,929	833	1,968	376	53	174	82	16	133	16	1,342	11	2	12	.....	11	3
Ontario	1,039,890	902,161	76,483	61,246	118,156	2,102	2,383	6,407	5,664	1,697	5,316	377	10,679	87	34	86	9	101	109
Prince Edward Island	1,668	926	424	318	198	45	15	25	36	4	10	.....	410	1	1	1	.....	3	2
Quebec	193,941	162,546	18,826	12,569	10,985	1,387	267	2,313	998	495	1,949	101	6,008	15	5	24	1	31	73
Saskatchewan	1,319,724	510,979	762,571	46,174	271,225	750	1,936	2,435	2,514	1,763	2,909	30	14,161	27	17	25	4	52	89
Yukon Territory	3,734	3,681	.....	53	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	1	.....	.....	.....
Total	5,087,788	2,771,387	2,083,650	232,751	1,151,700	9,556	11,637	19,982	15,709	7,374	17,677	1,135	83,882	350	123	262	41	469	751

TABLE No. 4—LIVE STOCK AND POULTRY: GENERAL EFFECTS

Agencies	Horses			Cattle					Poultry	General Effects					
	Stallions	Geldings and Mares	Foals	Bulls	Steers and work Oxen	Milch Cows	Young Stock	Other Stock		Motor and Sail Boats	Row Boats and Canoes	Rifles and Shot Guns	Steel Traps	Nets	Tents
ALBERTA															
Blackfoot	.....	3,000	500	31	427	715	892	20	350	.....	.....	.....	30	.....	180
Blood	10	4,050	250	20	648	947	472	.....	2,000	.....	.....	52	220	.....	465
Edmonton	.....	461	.....	7	70	190	140	131	1,575	.....	15	144	1,170	79	127
Hobbema	.....	1,034	124	10	168	247	142	20	897	.....	.....	248	906	57	133
Lesser Slave Lake	29	1,118	188	8	15	130	184	.....	.....	.....	268	705	6,731	437	485
Peigan	2	2,242	.....	19	207	.....	928	677	200	.....	.....	49	.....	.....	127
Saddle Lake	2	522	.....	1	10	287	274	65	685	.....	71	176	1,983	172	123
Sarcee	5	800	.....	13	41	161	131	.....	200	.....	.....	18	200	.....	40
Stony	25	1,000	200	.....	.....	10	218	349	175	.....	.....	160	800	.....	200
Total	73	14,227	1,262	109	1,586	2,687	3,381	1,262	6,082	.....	354	1,552	12,040	745	1,880
BRITISH COLUMBIA															
Babine	8	530	77	15	314	332	197	110	530	40	103	1,391	24,900	287	216
Bella Coola	4	275	30	4	50	116	73	100	186	184	305	565	6,550	100	77
Cowichan	.....	173	29	.....	.....	126	29	700	9,700	214	328	535	18	99	192
Kamloops	7	1,175	196	10	25	157	175	244	1,855	50	378	1,105	.....	.....	215
Kootenay	13	1,550	215	11	321	777	233	.....	735	.....	53	178	920	.....	142
Kwawkewlth	.....	.....	.....	.....	.....	.....	.....	.....	448	155	233	280	3,250	209	74
Lytton	24	497	143	29	119	87	333	285	1,815	3	97	313	5,222	64	187
New Westminster	7	204	43	13	124	232	151	694	3,199	39	123	311	1,469	142	104
Nicola	15	1,258	77	13	110	423	238	225	1,089	.....	7	139	257	.....	91
Okanagan	47	1,385	285	64	1,370	165	1,200	1,650	5,400	3	65	495	1,175	32	295
Queen Charlotte	.....	3	.....	.....	14	37	29	.....	200	97	110	185	400	45	35
Skeena River	3	23	7	4	4	28	10	15	1,150	270	313	687	4,400	266	161
Stikine	.....	20	.....	.....	.....	.....	.....	.....	.....	9	60	518	6,230	109	351
Stuart Lake	8	545	145	12	81	211	160	.....	135	27	253	644	5,540	298	194
Vancouver	.....	29	.....	2	30	15	12	8	3,850	115	172	307	800	152	109
West Coast	.....	5	.....	18	27	55	44	23	1,480	233	1,257	791	2,706	238	36
Williams Lake	74	2,655	488	40	.....	51	.....	1,950	1,775	.....	51	417	4,575	36	256
Total	210	10,327	1,735	235	2,589	2,812	2,884	6,004	33,547	1,439	3,908	8,861	68,412	2,077	2,735
MANITOBA															
Birtle	3	403	.....	2	23	67	25	9	1,560	.....	.....	165	1,160	4	143
Clandeboye	.....	203	21	4	15	148	137	.....	155	28	596	653	6,750	1,015	490
Fisher River	1	253	32	12	225	429	246	12	893	3	125	228	3,277	944	93
Griswold	.....	239	15	2	7	51	66	.....	797	.....	2	118	1,662	.....	86
Manitowapah	.....	474	20	16	143	540	626	68	910	23	212	470	4,750	1,970	217
Norway House	.....	14	.....	.....	5	23	24	.....	.....	10	755	970	8,100	1,950	605
Pas	.....	198	.....	8	31	201	181	.....	.....	.....	510	635	17,500	1,180	540
Portage la Prairie	.....	215	7	2	7	30	59	37	450	2	4	70	1,200	.....	42
Total	4	1,999	95	46	456	1,489	1,364	126	4,765	66	2,204	3,309	44,399	7,063	2,216

New Brunswick														
Northern Division		11				6	5	3	150		12	21	260	1	10
Northeastern Division		18			2	22	17	3	233	35	119	175	285	182	36
Southwestern Division		2							45		25	69	810		2
Total		31			2	28	22	6	428	35	156	265	1,355	183	48
Northwest Territories															
Fort Resolution									1,850	61	640	735	9,080	870	391
Nova Scotia															
Annapolis						2					4	15	45	4	3
Antigonish and Guysboro		3			4	7	6	18	68	1	3	19	39	4	2
Cape Breton (Eskasoni)		9		2		25	7	5	57	2	3	20	45	2	4
Cape Breton (Sydney)		2					1					3	96		
Colchester		4				3	1	4	15		2	20	60		1
Cumberland		1				1			18		1	12	110		1
Digby											17	180			
Halifax		3				8	11	10	90		4	10	30		
Hants (Indian Brook)		2				6	2	2	28			10	95		1
Hants (Windsor)		1				1	2		25	1	2	12	40	2	2
Inverness		11		1		19	5		12	3	14	36	370	6	1
Kings						1	1	1	20			7	30		2
Lunenburg		3			6	3	8	12	40		4	5	16	4	2
Pictou	1	1							25	2	8	45	360		1
Queens					2		1		12		4	11	60	2	2
Richmond		10			4	16	10		50	3	10	25	75	4	
Shelburne		2			4	2	1		56	2	2	11	230		2
Victoria		3				12	7		20		7	18	90	1	
Yarmouth												3			
Total	1	55		3	20	106	63	52	536	14	85	462	1,791	29	24
Ontario															
Alnwick		31				29	16	14	350	4	35	37	2,600		13
Cape Croker	1	82	8	2		112	202	68	600	7	24	22	80	74	8
Caradoc	2	380	35	7	90	425	265	800	4,900		2	180	650		11
Chapleau										25	275	275	3,000	250	200
Christian Island		56		1	6	34	30	40	250	9	16	40	120	50	15
Fort Frances	5	81	9		11	16	3		67	20	135	164	2,971	355	101
Fort William		42		1		20	22		545	21	332	487	3,770	766	280
Georgina Island		30	2	1		20	12	25	250	7	10	12	75	5	3
Golden Lake		8	2			8			200	1	20	40	200	5	20
Gore Bay	1	91	6	2	10	59	30	159	435	12	11	56	235	38	
Kenora	15	104	9	2	4	7				34	307	340	11,500	510	278
Manitowaning	2	447	57	6		218	213	340	1,735	99	130	330	2,615	206	84
Moravian		80	3			30	26	50	1,000		5	25	60		5
New Credit		115	5	3	15	108	23	56	565		1	30	130		
Parry Sound	2	66	3	6	6	52	64	33	500	12	64	240	730	24	50
Rama		10	1			7	2		170		30	70	1,500		25
Rice Lake		38	2	4	20	65	95	52	900	5	111	165	8,300		29

TABLE No. 4—LIVE STOCK AND POULTRY: GENERAL EFFECTS—*Concluded*

Agencies	Horses			Cattle					Poultry	General Effects					
	Stallions	Geldings and Mares	Foals	Bulls	Steers and work Oxen	Milch Cows	Young Stock	Other Stock		Motor and Sail Boats	Row Boats and Canoes	Rifles and Shot Guns	Steel Traps	Nets	Tents
ONTARIO—*Concluded*															
Sarnia		65	3	3	15	50	45	50	1,800	4	22	75	250		2
Saugeen		69	1	1		51	46	19	625		5	78	270	10	5
Sault Ste. Marie		135	8	6	16	96	39		1,340	27	90	138	2,500	160	45
Savanne		8	1							33	349	469	24,500	507	309
Seugog		4	1						50		15	10	800		6
Six Nations	5	910	209	30	651	1,394	1,960	2,950	46,100		31	240	430		5
Sturgeon Falls	4	62	6	10	10	62	48	19	740	52	170	325	2,050	110	165
Thessalon	3	55	10	3	3	47	35	55	895	30	86	103	1,196	81	104
Tyendinaga		300	17	35	20	650	200	500	7,000	7	30	50	1,500	20	3
Walpole Island	5	360	55	4	65	195	200	125	1,220	14	60	170	4,250	10	2
Total	45	3,629	453	127	942	3,755	3,576	5,355	72,237	423	2,366	4,171	76,282	3,181	1,768
PRINCE EDWARD ISLAND		16	1			18	10		130	4	10	27	60	32	
QUEBEC															
Bécancour		2	1	1		10	4	2	75		3	5	60	2	
Bersimis		13		2		17	4		150	11	165	130	2,850	22	195
Cacouna											4	15	61		
Caughnawaga		300	60	150		1,500	200	700	7,000	25	40	2,000	75	3	2
Jeune Lorette		2	1			3			435		37	67	750		10
Maniwaki		55	1	4	1	77	75	47	397		77	125	1,975	31	69
Maria		3		1		11	5		40		10	18	14		2
Mingan										3	33	55	2,000	20	30
Oka		80	25	10		75	40	40	600		40	40	30		5
Pierreville		6		2		25	15	6	60		20	25	60	2	4
Pointe Bleue	1	24	17	14		66	44	88	634	5	200	500	9,000	200	250
Restigouche		30	2	8	9	60	20	35	240		23	150	250		17
Seven Islands										5	330	525	11,000	200	250
St. Regis	5	215	40	35	12	340	290	200	3,800	50	195	100	1,365	50	4
Timiskaming		17		1		17	18	12	250	3	150	300	3,000	150	150
Total	6	747	147	228	22	2,201	715	1,130	13,681	102	1,327	2,255	32,490	680	988
SASKATCHEWAN															
Assiniboine		360	33		19	66	98		262			36	600		30
Battleford	5	1,298	81	16	208	355	227	22	2,140		59	474	4,410	272	398
Carlton		607		33	303	644	467		924	3	36	137	2,786	62	153
Crooked Lakes		586		8	66	229	148	65	1,700			195	950	19	145
Duck Lake	3	502	19	15	89	332	405	32	675		8	210	2,350	23	90
File Hills Agency		400	5	6	60	60	46	167	608			61	478		49

Isle à la Crosse		73		2	2	28	8			430	550	9,750	750	429
Moose Mountain	1	117		3	9	47	47		150		65	800	2	60
Moose Woods	1	88	5	2	25	81	95		75	2	20	100	1	20
Onion Lake		696		11	174	430	400		1,725	82	320	10,400	168	138
Pelly		240	8	7	118	215	105	4	600		160	1,000		102
Qu'Appelle	4	556	45	10	125	255	187	118	722	7	131	688	15	131
Touchwood		437		6	48	278	309		375		231	4,200		163
Wood Mountain Reserve		107	1	1	2	4			25		13			13
Total	14	6,067	197	120	1,248	3,024	2,542	408	9,981	3	624	2,603	38,512	1,312	1,921
YUKON TERRITORY															
Yukon		1				2	1		35	2		4			2

RECAPITULATION

PROVINCES															
Alberta	73	14,227	1,262	109	1,586	2,687	3,381	1,262	6,082		354	1,552	12,040	745	1,880
British Columbia	210	10,327	1,735	235	2,589	2,812	2,884	6,004	33,547	1,439	3,908	8,861	68,412	2,077	2,735
Manitoba	4	1,999	95	46	456	1,489	1,364	126	4,765	66	2,204	3,309	44,399	7,063	2,216
New Brunswick		31			2	28	22	6	428	35	156	265	1,355	183	48
Northwest Territories									1,850	61	640	735	9,080	870	391
Nova Scotia	1	55		3	20	106	63	52	536	14	85	462	1,791	29	24
Ontario	45	3,629	453	127	942	3,755	3,576	5,355	72,237	423	2,366	4,171	76,282	3,181	1,768
Prince Edward Island		16	1			18	10		130	4	10	27	60	32	
Quebec	6	747	147	228	22	2,201	715	1,130	13,681	102	1,327	2,255	32,490	680	988
Saskatchewan	14	6,067	197	120	1,248	3,024	2,542	408	9,981	3	624	2,603	38,512	1,312	1,921
Yukon Territory		1				2	1		35	2		4			2
Total	353	37,099	3,890	868	6,865	16,122	14,558	14,343	143,272	2,149	11,674	24,244	284,421	16,172	11,973

TABLE No. 5—VALUE OF REAL AND PERSONAL PROPERTY AND PROGRESS DURING THE YEAR

Agencies	Total Value of Lands in Reserves	Value of Private Fencing	Value of Private Buildings	Value of Public Buildings Property of the Band	Value of Implements and Vehicles	Value of Live Stock and Poultry	Value of General Effects	Value of Household Effects	Total Value of Real and Personal Property	Progress During the Year 1928		
										Value of New Land Improvements	Value of Buildings Erected	Total Increase in Value
	$	$	$	$	$	$	$	$	$	$	$	$
ALBERTA												
Blackfoot	3,000,000	24,000	312,000	84,000	125,000	180,000	8,500	26,000	3,759,500	500	23,785	24,285
Blood	7,081,720	31,880	80,000	22,100	161,000	54,000	37,200	28,700	7,496,600	2,764	1,500	4,264
Edmonton	1,080,100	16,850	91,050	9,425	35,280	25,700	5,463	13,285	1,277,153	2,165	2,750	4,915
Hobbema	1,528,480	31,277	42,820	.....	84,769	76,285	12,081	8,715	1,784,427	18,860	1,200	20,060
Lesser Slave Lake	2,393,302	14,275	53,650	.....	21,840	70,120	49,950	31,400	2,634,537	.....	.....	.....
Peigan	987,840	4,687	40,537	10,230	54,290	130,530	16,117	11,286	1,255,517	2,750	2,550	5,300
Saddle Lake	718,208	2,855	23,800	.....	21,355	41,061	5,290	6,985	819,554	2,341	300	2,641
Sarcee	1,180,420	11,000	21,000	35,000	10,000	34,075	2,000	2,000	1,295,495	500	500	1,000
Stony	441,290	8,000	16,000	900	13,000	34,800	8,142	10,000	532,132	.....	.....	.....
Total	18,411,360	144,824	680,857	161,655	526,534	646,571	144,743	138,371	20,854,915	29,880	32,585	62,465
BRITISH COLUMBIA												
Babine	124,300	12,910	151,100	14,350	27,050	80,350	63,300	34,000	507,360	4,500	4,500	9,000
Bella Coola	352,600	2,500	129,500	15,100	28,500	16,820	138,000	62,000	745,020	2,000	9,500	11,500
Cowichan	1,757,300	118,900	187,800	12,300	113,150	45,250	76,700	81,550	2,392,950	1,450	5,375	6,825
Kamloops	931,080	24,329	31,845	20,200	32,900	46,465	10,850	11,500	1,109,169	.....	887	887
Kootenay	471,980	11,860	20,335	117,700	24,660	86,555	8,190	7,150	748,430	1,915	.....	1,915
Kwawkewlth	246,190	2,280	185,600	4,400	85,500	448	75,800	76,000	676,218	.....	9,500	9,500
Lytton	940,666	20,135	76,635	24,580	41,019	74,285	10,405	19,735	1,207,460	4,500	2,150	6,650
New Westminster	847,438	20,145	62,150	22,800	34,300	36,600	23,790	26,000	1,073,223	.....	.....	.....
Nicola	1,346,535	26,972	52,047	26,038	48,575	121,368	6,550	9,550	1,637,635	300	2,235	2,535
Okanagan	1,919,260	23,250	114,000	36,000	51,500	173,500	13,750	21,000	2,352,260	6,500	2,250	8,750
Queen Charlotte	70,000	1,045	80,000	1,500	6,900	4,090	41,000	28,000	232,445	.....	8,000	8,000
Skeena River	1,066,821	10,000	294,000	118,000	5,850	6,750	248,500	67,850	1,817,771	1,000	7,500	8,500
Stikine	2,075	40	22,170	.....	6,168	2,375	15,426	27,333	75,587	.....	.....	.....
Stuart Lake	259,571	16,615	92,400	25,200	15,460	33,220	22,850	26,715	492,031	1,100	.....	1,100
Vancouver	1,695,495	5,900	114,650	68,950	17,470	8,270	22,600	27,450	1,960,785	.....	.....	.....
West Coast	112,500	3,720	112,650	4,175	3,978	3,405	60,150	31,080	331,658	500	3,270	3,770
Williams Lake	466,120	53,600	29,700	8,000	22,400	101,200	11,100	12,800	704,920	5,600	400	6,000
Total	12,609,931	354,201	1,756,582	519,293	565,380	840,861	848,961	569,713	18,064,922	29,365	55,567	84,932
MANITOBA												
Birtle	502,417	2,455	30,600	2,800	21,875	38,250	4,900	4,260	607,557	860	3,875	4,735
Clandeboye	449,009	7,460	177,000	19,000	18,470	30,900	14,500	25,050	741,389	.....	7,400	7,400
Fisher River	847,849	9,920	44,460	11,800	16,604	53,356	20,832	16,600	1,021,421	539	1,075	1,614
Griswold	217,040	1,135	16,975	8,710	29,800	24,850	2,680	5,650	306,840	103	168	271
Manitowapah	366,101	2,390	51,050	42,550	17,125	75,475	14,550	12,650	581,891	300	9,850	10,150
Norway House	133,008	710	46,600	8,200	1,570	14,900	51,500	14,600	271,088	.....	1,050	1,050
Pas	270,450	5,180	43,600	13,600	5,200	21,860	68,300	20,500	448,690	.....	.....	.....
Portage la Prairie	199,040	2,900	19,150	13,500	12,500	14,460	1,200	3,000	265,750	581	4,150	4,731
Total	2,984,914	32,150	429,435	120,160	123,144	274,051	178,462	102,310	4,244,626	2,383	27,568	29,951

New Brunswick												
Northern Division	19,060	130	11,500	42,000	1,500	1,800	525	3,800	80,315	.....	.....	.....
Northeastern Division	45,048	2,328	28,921	35,682	5,244	4,310	6,000	16,490	144,023	.....	600	600
Southwestern Division	6,900	470	17,530	16,200	500	185	1,240	1,675	44,700	.....	10,800	10,800
Total	71,008	2,928	57,951	93,882	7,244	6,295	7,765	21,965	269,038	.....	11,400	11,400
Northwest Territories												
Fort Resolution	.....	.....	.....	.....	.....	92,500	34,700	24,000	151,200	.....	.....	.....
Nova Scotia												
Annapolis	400	.....	1,850	.....	300	75	300	400	3,325	.....	.....	.....
Antigonish and Guysboro	6,000	950	3,800	3,000	425	575	295	475	15,520	.....	.....	.....
Cape Breton (Eskasoni)	10,000	200	1,400	5,000	750	1,400	875	225	20,550	250	400	650
Cape Breton (Sydney)	20,000	.....	21,000	2,500	25	25	250	2,000	45,800	.....	.....	.....
Colchester	3,000	200	6,500	1,000	800	550	400	550	13,000	.....	.....	.....
Cumberland	1,600	20	800	100	100	153	210	25	3,008	.....	.....	.....
Digby	1,800	60	2,500	2,000	.....	.....	300	3,500	10,160	.....	319	319
Halifax	2,300	1,400	6,300	.....	1,075	1,975	800	2,350	16,200	.....	.....	.....
Hants (Indian Brook)	5,550	146	620	3,000	200	560	147	396	10,519	.....	.....	.....
Hants (Windsor)	10,500	.....	1,500	.....	500	300	400	500	13,700	.....	.....	.....
Inverness	9,725	1,100	16,400	5,500	575	2,550	750	860	37,460	.....	50	50
Kings	4,400	100	1,200	.....	50	100	150	400	6,400	.....	.....	.....
Lunenburg	3,500	350	3,000	100	500	750	500	600	9,300	.....	.....	.....
Pictou	2,500	40	9,400	8,400	400	110	872	1,650	23,372	.....	.....	.....
Queens	2,500	100	2,000	.....	125	260	325	1,000	6,310	.....	.....	.....
Richmond	7,000	250	3,850	12,000	1,000	2,250	1,000	800	28,150	900	600	1,500
Shelburne	.....	.....	2,350	.....	550	550	550	800	4,800	.....	.....	.....
Victoria	6,500	290	2,550	3,250	550	500	500	450	14,590	30	10	40
Yarmouth	500	15	.....	.....	300	.....	300	200	1,315	.....	.....	.....
Total	97,775	5,221	87,020	45,850	8,225	12,683	8,924	17,881	283,579	1,180	1,379	2,559
Ontario												
Alnwick	76,500	5,000	37,000	8,000	4,000	9,000	2,850	15,000	157,350	.....	1,000	1,000
Cape Croker	150,000	8,420	72,500	35,250	15,300	29,700	7,250	7,000	325,420	.....	1,250	1,250
Caradoc	150,350	14,400	116,950	36,200	25,650	38,300	3,900	32,700	418,450	750	450	1,200
Chapleau	18,400	350	35,000	1,000	.....	.....	5,000	.....	59,750	.....	.....	.....
Christian Island	35,700	1,960	8,850	7,150	3,250	7,300	2,000	3,275	69,485	70	100	170
Fort Frances	200,035	1,500	33,600	8,500	19,032	8,150	7,800	11,500	290,117	3,000	1,000	4,000
Fort William	182,460	600	31,500	11,300	2,796	7,470	11,067	8,000	255,196	.....	9,500	9,500
Georgina Island	32,150	350	8,500	5,500	1,100	3,000	5,500	1,800	57,900	.....	.....	.....
Golden Lake	3,000	700	4,000	3,100	1,000	2,000	3,000	3,000	19,800	.....	.....	.....
Gore Bay	35,000	15,020	30,000	26,550	11,350	16,945	7,200	16,200	158,265	140	700	840
Kenora	142,495	1,005	51,600	250	8,494	6,420	39,405	28,150	277,819	.....	.....	.....
Manitowaning	247,000	22,675	70,775	36,850	46,800	42,150	19,750	42,605	528,605	620	1,100	1,720
Moravian	60,000	4,000	20,000	7,500	8,000	8,500	20,000	2,000	130,000	500	300	800
New Credit	225,000	11,500	50,900	9,500	10,750	19,400	900	15,000	342,950	.....	275	275
Parry Sound	122,000	950	20,900	19,300	12,200	13,500	7,621	16,000	212,471	.....	5,000	5,000
Rama	50,000	4,100	29,950	30,000	4,500	1,725	2,000	7,500	129,775	.....	16,500	16,500
Rice Lake	119,500	3,700	65,000	13,000	9,500	20,000	7,900	10,200	248,800	200	2,000	2,200

TABLE No. 5—VALUE OF REAL AND PERSONAL PROPERTY AND PROGRESS DURING THE YEAR—*Concluded*

Agencies	Total Value of Lands in Reserves	Value of Private Fencing	Value of Private Buildings	Value of Public Buildings Property of the Band	Value of Implements and Vehicles	Value of Live Stock and Poultry	Value of General Effects	Value of Household Effects	Total Value of Real and Personal Property	Progress During the Year 1928		
										Value of New Land Improvements	Value of Buildings Erected	Total Increase in Value
	$	$	$	$	$	$	$	$	$	$	$	$
ONTARIO—*Concluded*												
Sarnia	550,000	6,700	55,735	25,000	15,275	14,200	2,500	9,350	678,760	75	1,000	1,075
Saugeen	80,000	2,000	20,600	30,000	8,100	12,300	2,200	4,500	159,700	.....	600	600
Sault Ste. Marie	54,900	2,825	27,000	31,000	7,175	15,400	10,000	13,500	161,800	.....	.....	.....
Savanne	126,166	415	19,800	100	6,725	420	46,655	28,950	229,231	.....	.....	.....
Scugog	60,000	2,000	2,000	500	400	500	300	950	66,650	.....	.....	.....
Six Nations	1,092,400	436,960	678,500	65,000	287,900	271,800	14,200	72,000	2,918,760	.....	4,500	4,500
Sturgeon Falls	242,290	2,350	58,700	19,000	6,300	17,600	24,000	45,000	415,240	.....	2,500	2,500
Thessalon	129,064	9,705	14,700	12,800	5,825	12,650	12,633	8,565	205,942	.....	200	200
Tyendinaga	645,300	134,825	111,000	44,800	42,800	80,000	2,645	55,800	1,117,170	.....	2,500	2,500
Walpole Island	125,000	9,200	65,565	18,500	12,800	17,945	4,100	21,150	274,260	200	1,150	1,350
Total	4,954,710	703,210	1,740,625	505,650	577,025	676,375	272,376	479,695	9,909,666	5,555	51,625	57,180
PRINCE EDWARD ISLAND	20,000	1,650	10,500	10,000	1,100	2,000	3,000	2,700	50,950	20	400	420
QUEBEC												
Bécancour	4,000	310	800	.....	280	865	190	500	6,945	.....	200	200
Bersimis	51,000	675	54,300	33,000	900	3,250	8,700	14,000	165,825	.....	.....	.....
Cacouna	6,000	.....	2,350	.....	350	.....	1,030	4,285	14,015	.....	.....	.....
Caughnawaga	800,000	8,000	500,000	100,000	75,000	60,000	30,000	120,000	1,693,000	700	40,000	40,700
Jeune Lorette	32,000	600	56,500	31,000	14,000	1,475	2,000	22,000	159,575	.....	1,500	1,500
Maniwaki	36,140	4,690	25,335	2,095	12,350	12,613	6,710	13,190	113,123	195	1,050	1,245
Maria	20,000	560	6,000	5,000	1,200	750	750	3,150	37,410	.....	.....	.....
Mingan	.....	.....	2,000	5,600	.....	.....	4,500	800	12,900	.....	.....	.....
Oka	30,000	3,000	20,000	3,000	4,000	9,000	.....	5,000	74,000	400	3,400	3,800
Pierreville	35,000	1,000	62,500	2,500	1,200	2,500	2,000	16,000	122,700	.....	500	500
Pointe Bleue	46,000	6,000	42,500	14,000	17,500	10,250	15,000	15,000	166,250	.....	600	600
Restigouche	173,000	12,100	56,000	.....	15,000	10,000	18,000	16,000	300,100	.....	.....	.....
Seven Islands	1,500	25	9,800	4,000	1,500	.....	6,000	14,000	36,825	.....	1,000	1,000
St. Regis	250,000	2,450	114,000	17,000	13,100	39,000	11,000	38,100	484,650	250	3,500	3,750
Timiskaming	35,000	1,700	9,000	1,700	2,200	3,500	7,500	3,500	64,100	.....	.....	.....
Total	1,519,640	41,110	961,085	218,895	158,580	153,203	113,380	285,525	3,451,418	1,545	51,750	53,295
SASKATCHEWAN												
Assiniboine	427,924	4,079	19,721	3,949	19,922	36,458	701	10,679	523,433	300	3,320	3,620
Battleford	3,313,008	35,900	77,700	5,500	79,600	84,660	22,250	24,600	3,643,218	2,780	3,550	6,330
Carlton	1,800,117	10,191	38,660	2,300	23,725	83,905	4,700	5,075	1,968,673	7,590	350	7,940
Crooked Lakes	924,183	10,000	65,200	200	49,900	51,530	13,150	9,500	1,123,663	792	8,725	9,517

Duck Lake	1,769,725	21,000	40,200	9,300	35,700	97,600	7,650	27,500	2,008,675	1,400	850	2,250
File Hills Agency	990,000	4,210	61,600	.....	34,990	33,490	9,370	26,000	1,159,660	850	85	935
Isle à la Crosse	105,822	450	49,400	300	400	5,650	129,000	43,000	334,022	.....	.....	.....
Moose Mountain	250,800	2,100	13,330	3,000	9,500	8,860	1,900	2,000	291,490	1,952	2,950	4,902
Moose Woods	62,495	6,000	4,000	.....	5,500	20,000	2,500	9,500	109,995	100	250	350
Onion Lake	2,191,740	15,700	50,450	5,500	36,470	93,575	13,035	16,500	2,422,970	1,482	800	2,282
Pelly	669,800	4,200	28,900	4,500	18,500	32,000	6,150	14,300	778,350	500	750	1,250
Qu'Appelle	962,715	14,530	41,310	35,375	45,008	64,269	6,255	14,520	1,183,952	2,630	1,950	4,580
Touchwood	1,179,468	18,400	39,000	300	20,840	61,360	19,000	19,200	1,357,568	1,080	2,900	3,980
Wood Mountain Reserve	15,840	20	1,000	100	1,500	4,000	300	800	23,560	.....	.....	.....
Total	14,663,637	146,780	530,471	70,324	381,555	677,357	235,961	223,174	16,929,259	21,456	26,480	47,936
YUKON TERRITORY												
Yukon	3,734	.....	.....	.....	.....	.....	.....	.....	3,734	.....	.....	.....

RECAPITULATION

PROVINCES												
Alberta	18,411,360	144,824	680,857	161,655	526,534	646,571	144,743	138,371	20,854,915	29,880	32,585	62,465
British Columbia	12,609,931	354,201	1,756,582	519,293	565,380	840,861	848,961	569,713	18,064,922	29,365	55,567	84,932
Manitoba	2,984,914	32,150	429,435	120,160	123,144	274,051	178,462	102,310	4,244,626	2,383	27,568	29,951
New Brunswick	71,008	2,928	57,951	93,882	7,214	6,295	7,765	21,965	269,038	.....	11,400	11,400
Northwest Territories	.....	.....	.....	.....	.....	92,500	34,700	24,000	151,200	.....	.....	.....
Nova Scotia	97,775	5,221	87,020	45,850	8,225	12,683	8,924	17,881	283,579	1,180	1,379	2,559
Ontario	4,954,710	703,210	1,740,625	505,650	577,025	676,375	272,376	479,695	9,909,666	55,555	51,625	57,180
Prince Edward Island	20,000	1,650	10,500	10,000	1,100	2,000	3,000	2,700	50,950	20	400	420
Quebec	1,519,640	41,110	961,085	218,895	158,580	153,203	113,380	285,525	3,451,418	1,545	51,750	53,295
Saskatchewan	14,663,637	146,780	530,471	70,324	381,555	677,357	235,961	223,174	16,929,259	21,456	26,480	47,936
Yukon Territory	3,734	.....	.....	.....	.....	.....	.....	.....	3,734	.....	.....	.....
Total	55,336,709	1,432,074	6,254,526	1,745,709	2,348,787	3,381,896	1,848,272	1,865,334	74,213,307	91,384	258,754	350,238

TABLE No. 6—SOURCES AND VALUE OF INCOME

Agencies	Value of Farm Products, including Hay	Value of Beef Sold also of that used for Food	Wages Earned	Received from Land Rentals	Received from Timber	Earned by Fishing	Earned by Hunting and Trapping	Earned by other Industries and Occupations	Annuities paid and Interest on Indian Trust Funds	Total Income of Indians
	$	$	$	$ cts.	$ cts.	$	$	$	$ cts.	$ cts.
ALBERTA										
Blackfoot	75,000	28,564	3,500	37,325 94	.....	.....	2,000	5,000	100,843 89	252,233 83
Blood	109,456	19,367	15,000	14,864 00	.....	.....	2,000	5,200	7,046 86	172,933 86
Edmonton	51,909	5,414	20,390	416 65	37 50	2,421	13,046	6,510	24,449 75	124,593 90
Hobbema	92,099	8,003	12,725	757 50	.....	3,875	2,346	23,645	14,490 34	157,940 84
Lesser Slave Lake	36,200	2,050	26,000	.....	.....	13,050	79,300	2,565	17,439 61	176,604 61
Peigan	33,432	31,285	5,000	2,843 72	.....	.....	.....	.....	6,176 61	78,737 33
Saddle Lake	35,108	8,020	12,040	.....	.....	.....	1,755	6,565	5,240	6,203 51	74,931 51
Sarcee	10,873	3,744	3,777	2,552 50	.....	.....	331	1,000	838 96	23,116 46
Stony	14,350	6,262	27,701	3,268 10	.....	.....	8,627	8,751	5,100 49	74,059 59
Total	458,427	112,709	126,133	62,028 41	37 50	21,101	114,215	57,911	182,590 02	1,135,151 93
BRITISH COLUMBIA										
Babine	32,375	6,900	59,390	120 00	.....	14,500	57,100	35,200	456 92	206,041 92
Bella Coola	7,050	5,700	23,500	100 00	802 84	112,000	30,700	8,500	178 74	188,531 58
Cowichan	51,000	2,650	146,450	2,405 63	.....	31,100	.....	50	3,709 34	237,364 97
Kamloops	81,710	.....	91,250	3,851 00	175 52	3,800	.....	.....	2,734 44	183,520 96
Kootenay	38,450	10,650	20,050	100 00	.....	1,100	5,650	4,250	558 47	80,808 47
Kwawkewlth	.....	.....	15,350	440 00	10,373 81	60,600	3,900	6,950	1,268 49	98,882 30
Lytton	44,220	9,920	95,800	492 00	2,141 47	200	3,600	8,300	1,156 90	165,830 37
New Westminster	24,275	8,375	93,200	4,763 60	5,905 01	31,750	10,850	36,300	2,636 93	218,055 54
Nicola	41,500	3,450	.....	.....	.....	.....	1,500	.....	.....	46,450 00
Okanagan	70,000	16,450	44,000	625 00	51 24	450	7,750	6,750	770 29	146,846 53
Queen Charlotte	450	500	20,000	.....	.....	17,000	2,700	6,000	108 36	46,758 36
Skeena River	23,150	1,200	42,300	375 00	1,931 95	126,350	39,900	38,950	3,268 47	277,425 42
Stikine	2,220	.....	10,822	.....	.....	6,675	132,115	10,966	.....	162,798 00
Stuart Lake	21,200	5,875	22,635	.....	.....	10,340	28,200	2,830	1,963 05	93,043 05
Vancouver	6,075	475	41,150	10,218 43	1,771 37	48,600	13,250	25,000	12,080 48	158,620 28
West Coast	806	665	8,050	155 00	.....	75,007	14,739	1,785	95 71	101,302 71
Williams Lake	42,700	13,800	46,000	.....	.....	.....	23,000	3,000	.....	128,500 00
Total	487,181	86,610	779,947	23,645 66	23,153 21	539,472	374,954	194,831	30,986 59	2,540,780 46
MANITOBA										
Birtle	32,995	705	11,300	173 20	.....	2,070	4,620	4,025	3,803 64	59,691 84
Clandeboye	30,910	3,225	23,200	536 00	405 10	16,800	22,600	7,000	15,830 22	120,506 32
Fisher River	16,720	13,335	22,700	150 00	.....	24,100	5,226	9,850	9,138 20	101,219 20
Griswold	33,692	1,120	4,500	.....	.....	.....	1,500	1,300	3 63	42,115 63
Manitowapah	31,577	8,470	12,450	.....	.....	15,100	7,800	7,350	10,882 68	93,629 68
Norway House	5,760	.....	21,000	.....	.....	17,000	104,000	14,200	13,895 00	175,855 00
Pas	12,900	2,650	67,500	104 00	1 00	13,500	107,000	.....	14,701 53	218,356 53
Portage la Prairie	30,525	600	2,450	565 03	.....	.....	1,800	850	7,778 84	44,568 87
Total	195,079	30,105	165,100	1,528 23	406 10	88,570	254,546	44,575	76,033 74	855,943 07

New Brunswick										
Northern Division	2,000	250	11,500			600	1,700	700	972 29	17,722 29
Northeastern Division	7,210	140	9,200	75 00	624 62	5,100	565	2,800	820 98	26,535 60
Southwestern Division	980		13,000			150	1,200	2,575	54 20	17,959 20
Total	10,190	390	33,700	75 00	624 62	5,850	3,465	6,075	1,847 47	62,217 09
Northwest Territories										
Fort Resolution						25,350	159,600			184,950 00
Nova Scotia										
Annapolis	300		1,600			70	160	1,370		3,500 00
Antigonish and Guysboro	770	150	1,775	81 50		340	465	1,675		5,256 50
Cape Breton (Eskasoni)	875	400	2,500			430	520	750		5,475 00
Cape Breton (Sydney)			2,000			55		350		2,405 00
Colchester	350		1,800				300	2,500		4,950 00
Cumberland	225		2,850				160	225		3,460 00
Digby	300		2,000			300	500	1,200		4,300 00
Halifax	2,950	1,400	7,900				500	5,950		18,700 00
Hants (Indian Brook)	334	40	1,100				155	250		1,879 00
Hants (Windsor)	300	50	3,500			200	1,800	400		6,250 00
Inverness	1,496		3,500			800	475	2,200		8,471 00
Kings	200	15	2,000		1 13	100	200	300		2,816 13
Lunenburg	1,200	150	1,200	20 00			200	1,000		3,770 00
Pictou	230		5,100			50	950	4,800		11,130 00
Queens	150		2,500	100 00		185	500			3,435 00
Richmond	1,500	50	600			200	20	60		2,430 00
Shelburne	150		4,471			75	233	350		5,279 00
Victoria	1,800	150	7,500			650	425	4,850		15,375 00
Yarmouth			300				200			500 00
										*1,530 39
Total	13,130	2,405	54,196	201 50	1 13	3,455	7,763	28,230	*1,530 39	110,912 02
Ontario										
Alnwick	4,872	175	12,500	1,835 50		900	5,000	900	11,256 17	37,438 67
Cape Croker	7,220	2,160	11,000	575 00	348 85	4,980	150	2,250	21,685 99	50,369 84
Caradoc	80,290	6,100	59,500	1,792 75	10 80		3,500	1,600	3,552 86	156,346 41
Chapleau	1,500		10,000				30,000		13,240 00	54,740 00
Christian Island	4,000	500	4,000		3,587 74	350	300	650	14,122 43	27,510 17
Fort Frances	7,300	120	31,000	2,816 60	455 15	25,300	37,000	6,700	12,034 05	122,725 80
Fort William	1,650	1,500	39,600	1,012 60	50,559 90	14,200	15,600		14,492 67	138,615 17
Georgina Island	1,600	700	8,500		21 75	250	150	500	3,880 27	15,602 02
Golden Lake	500		2,000	73 00		15	15	100	11 72	2,714 72
Gore Bay	11,945	1,250	25,000		1,331 10	300	400		10,151 68	50,377 78
Kenora	7,945		66,000	410 00	8,524 68	72,656	45,040	65,185	20,664 29	286,424 97
Manitowaning	41,745	11,140	83,550	62 50	3,431 64	8,160	2,380	20,500	23,473 93	194,443 07
Moravian	8,500	500	6,000	617 00		100	400	5,000	5,472 54	26,589 54
New Credit	10,786	2,680	23,500	3,617 50			300	2,750	4,855 78	48,489 28

* Micmacs of Nova Scotia.

TABLE No. 6—SOURCES AND VALUE OF INCOME—*Concluded*

Agencies	Value of Farm Products, including Hay	Value of Beef Sold also of that used for Food	Wages Earned	Received from Land Rentals	Received from Timber	Earned by Fishing	Earned by Hunting and Trapping	Earned by other Industries and Occupations	Annuities paid and Interest on Indian Trust Funds	Total Income of Indians
ONTARIO—*Concluded*	$	$	$	$ cts.	$ cts.	$	$	$	$ cts.	$ cts.
Parry Sound	7,450	1,375	36,000	370 00	5,512 56		1,125		16,714 15	68,546 71
Rama	3,280	430	18,000	102 00	215 64	500	3,500	5,000	8,291 55	39,319 19
Rice Lake	14,500	5,000	20,000	1,096 00		3,200	10,000	6,800	8,533 52	69,129 52
Sarnia	6,084	800	21,500	4,253 00		300		1,200	16,313 62	50,450 62
Saugeen	12,000	275	11,000	105 00	294 23	200	1,200	3,200	16,545 16	44,819 39
Sault Ste. Marie	17,600	3,150	20,200	400 00	19,614 68	15,000	14,000	12,500	12,300 17	114,764 85
Savanne	2,865		60,840	50 00		60,840	46,640	58,300	6,085 00	235,620 00
Scugog			1,000	663 00		60	800	1,000	1,039 48	4,562 48
Six Nations	198,000		151,000	4,139 00	266 75		1,340	45,000	43,672 58	443,418 33
Sturgeon Falls	12,000	500	40,500			2,300	11,500	23,000	60,763 26	150,563 26
Thessalon	68,050		33,500	50 00	1,309 55	1,000	6,100	7,350	6,684 33	124,043 88
Tyendinaga	90,000	3,000	45,000	9,342 01		3,500	400	4,000	5,427 52	160,669 53
Walpole Island	26,500	2,450	21,750			525	575	8,600	2,849 27	63,249 27
Total	648,182	43,805	862,440	33,382 46	95,485 02	214,636	237,415	282,085	364,113 99	2,781,544 47
PRINCE EDWARD ISLAND	2,096	400	975			925	300	5,000		9,696 00
QUEBEC										
Becancour	125	300	200			20	50		318 12	1,013 12
Bersimis	1,100	400	4,500	900 00	7 00	164	80,000	3,300	6,214 77	96,585 77
Cacouna			2,500		150 00	50	200		488 34	3,388 34
Caughnawaga	35,000	3,000	150,000	8,991 74				30,000	240 25	227,231 99
Jeune Lorette			33,000				2,600	30,800	758 74	67,158 74
Maniwaki	7,671	464	33,802	217 00	4,596 91	139	27,880	2,437	3,635 62	80,842 53
Maria	700	60	4,000			100		200		5,060 00
Mingan							7,800	300		8,100 00
Oka	7,500	2,000				100	200	1,000	361 96	11,161 96
Pierreville	2,000	1,000	3,500	140 00			1,000	5,000	250 21	12,890 21
Pointe Bleue	5,672	600	12,000	1 00	7,408 38	1,000	75,000	3,000	718 93	105,400 31
Restigouche	11,500	400	8,000	240 00	681 17	150	100	400	268 86	21,740 03
Seven Islands			1,500				15,000	1,500		18,000 00
St. Regis	8,000	2,000	135,000	1,551 19		4,500	3,800	23,000	3,554 44	181,405 63
Timiskaming	2,500	150	6,000	25 00	10 25	50	26,000	1,200	1,889 65	37,824 90
Total	81,768	10,374	394,002	12,065 93	12,853 71	6,273	239,630	102,137	18,699 89	877,803 53
SASKATCHEWAN										
Assiniboine	15,294	2,050	1,361				4,058	7,240	1,518 48	31,521 48
Battleford	34,280	8,030	48,550	2,615 00		7,050	19,400	8,300	15,460 11	143,685 11
Carlton	60,867	29,304	18,800	20 00		945	17,900	8,975	21,394 51	158,205 51

Crooked Lakes	46,592	7,650	5,500	154 00	.....	.....	3,750	800	27,659 76	92,105 76
Duck Lake	74,150	14,060	11,600	.....	24 00	725	9,600	12,800	8,483 36	131,442 36
File Hills Agency	36,500	2,508	5,420	.....	.....	.....	2,360	6,700	2,028 75	55,516 75
Isle à la Crosse	3,400	.....	4,000	.....	.....	5,000	139,050	.....	12,293 91	163,743 91
Moose Mountain	6,869	3,160	3,350	.....	60 15	75	3,290	900	2,695 40	20,399 55
Moose Woods	11,000	2,740	200	.....	.....	75	225	2,000	.....	16,240 00
Onion Lake	62,978	11,600	18,700	.....	.....	18,000	16,200	8,500	5,526 36	141,504 36
Pelly	24,590	5,300	5,500	2,717 15	.....	.....	4,200	.....	16,532 13	58,839 28
Qu'Appelle	72,843	2,560	9,500	1,350 00	.....	200	2,159	5,390	25,911 53	119,913 53
Touchwood	41,830	7,730	10,200	2,122 00	.....	.....	10,500	4,500	13,256 57	90,138 57
Wood Mountain Reserve	1,239	125	875	.....	.....	.....	80	.....	2 18	2,321 18
Total	492,432	96,817	143,556	8,978 15	84 15	32,070	232,772	66,105	152,763 05	1,225,577 35

RECAPITULATION

Provinces										
Alberta	458,427	112,709	126,133	62,028 41	37 50	21,101	114,215	57,911	182,590 02	1,135,151 93
British Columbia	487,181	86,610	779,947	23,645 66	23,153 21	539,472	374,954	194,831	30,986 59	2,540,780 46
Manitoba	195,079	30,105	165,100	1,528 23	406 10	88,570	254,546	44,575	76,033 74	855,943 07
New Brunswick	10,190	390	33,700	75 00	624 62	5,850	3,465	6,075	1,847 47	62,217 09
Northwest Territories	.....	.....	.....	.....	.....	25,350	159,600	.....	.....	184,950 00
Nova Scotia	13,130	2,405	54,196	201 50	1 13	3,455	7,763	28,230	1,530 39	110,912 02
Ontario	648,182	43,805	862,440	33,382 46	95,485 02	214,636	237,415	282,085	364,113 99	2,781,544 47
Prince Edward Island	2,096	400	975	.....	.....	925	300	5,000	.....	9,696 00
Quebec	81,768	10,374	394,002	12,065 93	12,853 71	6,273	239,630	102,137	18,699 89	877,803 53
Saskatchewan	492,432	96,817	143,556	8,978 15	84 15	32,070	232,772	66,105	152,763 05	1,225,577 35
Total	2,388,485	383,615	2,560,049	141,905 34	132,645 44	937,702	1,624,660	786,949	828,565 14	9,784,575 92

SCHOOL STATEMENT

STATEMENT of Indian Day Schools in the Dominion for the Fiscal Year Ended March 31, 1929

School	Reserve	Agency	Teacher	Number on Roll			Average Attendance	Grades								
				Boys	Girls	Total		I	II	III	IV	V	VI	VII	VIII	IX
PRINCE EDWARD ISLAND																
Lennox Island	Lennox Island	P.E.I. Superintendency	John J. Sark	11	18	29	19	12	7	4	3	3	....	....	....	....
NOVA SCOTIA																
Afton	Afton	Antigonish Co	John L. McDonald	13	6	19	10	11	....	....	2	3	2	1	....	....
Eskasoni	Eskasoni	Cape Breton	Miss Mary McNeill	18	24	42	23	19	14	5	1	1	....	1	1	....
Sydney	Sydney	"	Miss Catherine Gallagher	20	10	30	17	15	4	6	3	2	....	....	....	....
Millbrook	Millbrook	Colchester	Mrs. Elizabeth Smith	10	9	19	13	3	3	3	6	2	....	2	....	....
Bear River	Bear River	Digby	Mrs. R. L. Ford	9	11	20	13	2	4	3	2	4	....	3	2	....
Shubenacadie	Indian Brook	Hants	Mrs. A. King	6	2	8	6	2	2	1	2	....	1	....	....	....
Malagawatch	Malagawatch	Inverness	Miss Mary Kennedy	5	6	11	9	2	2	4	3	....	....	....	....	....
Whycocomagh	Whycocomagh	"	Alexander Macdonald	19	21	40	16	17	10	4	4	3	1	1	....	....
Indian Cove	Fisher's Cove	Pictou	Miss G. McGirr	11	13	24	17	11	2	5	5	....	1	....	....	....
Salmon River	Salmon River	Richmond	John H. Landry	9	23	32	15	16	6	4	2	....	3	1	....	....
Middle River	Middle River	Victoria	John A. MacRae	10	12	22	12	7	6	3	2	2	2	....	....	....
Total, Nova Scotia				130	137	267	151	105	53	38	32	17	10	9	3	....
NEW BRUNSWICK																
Big Cove	Big Cove	Eastern	A. L. Fraser Mrs. A. L. Fraser	16	19	35	24	9	11	6	7	2	....	....	....	....
Burnt Church	Burnt Church	"	Miss Marion Cahoon Miss Evelyn Cahoon	35	23	58	41	22	7	10	13	4	2	....	....	....
Eel Ground	Eel Ground	"	Miss F. Sheasgreen	13	15	28	20	5	2	4	8	5	2	2	....	....
Eel River	Eel River	"	Miss A. Tremblay	11	7	18	15	....	5	....	7	3	....	2	1	....
Red Bank	Red Bank	"	Mrs. S. M. Kehoe	8	8	16	10	4	4	....	....	6	2	....	....	....
Kingsclear	Kingsclear	Western	Miss E. O'Brien	8	8	16	10	6	3	1	2	....	3	....	1	....
Oromocto	Oromocto	"	Miss E. Delaney	7	9	16	11	9	4	....	....	3	....	....	....	....
St. Mary's	St. Mary's	"	Miss M. T. Hughes	11	15	26	20	6	10	6	1	2	....	1	....	....
Woodstock	Woodstock	"	Sister M. Mercia Sister Catherine	11	11	22	15	9	6	1	3	3	....	....	....	....
Tobique	Tobique	Northern	Sister M. Praxades Sister M. Quentin Sister M. Claire	25	25	50	34	14	6	4	7	....	10	3	6	....
Total, New Brunswick				145	140	285	200	84	58	32	48	28	19	8	8	....

QUEBEC															
Bersimis	Bersimis	Bersimis	Sister St. Raphael Sister Marie du Carmel Sister M. Rose Alma Sister M. Louise Ida Sister M. Oswald Sister M. Gertrude Sister M. Lea Sister M. Angela Sister M. Alfred	27	27	54	36	25	26	3					
Caughnawaga R.C.	Caughnawaga	Caughnawaga	Sister M. Albertus Sister M. Agapit Sister Lea of Jesus Sister M. Jeanne Sister M. Claudine Sister M. Elodie Sister M. Jeanne Miss Annie Phillips Miss Margaret Snow	169	184	353	283	97	58	54	52	43	16	13	11	9
Caughnawaga Bush	Caughnawaga	Caughnawaga	Mrs. A. Beauvais	20	16	36	27	14	4	8	6	4				
Caughnawaga St. Isidore	Caughnawaga	Caughnawaga	Miss Margaret Regis	13	12	25	17	16	6	3						
Caughnawaga Protestant	Caughnawaga	Caughnawaga	Chas. A. Rae	18	20	38	30	22		3	5	7	1			
Lorette	Lorette	Lorette	Sister St. Pierre Sister St. Agnes de Jesus	40	30	70	58	19	29	18	4					
Maria	Maria	Maria	Miss Dora Gideon	16	14	30	20	9	7	9	2	2	1			
Congo Bridge	Congo Bridge	Maniwaki	Miss H. J. White	12	10	22	11	14	4	3	1					
Maniwaki	Maniwaki	Maniwaki	Miss E. McGregor	12	10	22	12	9	6	3	2	2				
Oka Country	Oka	Oka	H. E. Eburne	15	23	38	25	20	5	5	1	4		3		
Oka Village	"	"	Mrs. Bertha Tupper	12	16	28	15	15	7		3	1	2			
St. Frances R.C.	Pierreville	Pierreville	Sr. Mary Josephine Sr. Mary Ozanna Sr. St. Ulderic	25	25	50	45	16	13	8	8	2	2	1		
St. Frances C. E.	"	"	H. L. Masta	5	2	7	4	4	1		2					
Pointe Bleue	Pointe Bleue	Pointe Bleue	Sr. Marie du Cenacle Sr. St. Jeanne Sr. Mary of St. Joseph	48	42	90	58	41	31	7	11					
Restigouche	Restigouche	Restigouche	Sr. M. of St. Luc Sr. M. of St. Viateur	47	55	102	63	26	32	16	19	9				
Chenail	St. Regis	St. Regis	Miss A. Robillard	15	6	21	14	14	2	3	2					
Chetlain	"	"	Miss G. Legarde	14	4	18	9	7	8		2	1				
Cornwall Island	"	"	Colin Chisholm	19	16	35	19	28	5	2						
St. Regis Island	"	"	Miss M. Stacey	9	7	16	11	4	3	5	2	2				
St. Regis Village	"	"	Miss M. MacNulty Miss F. Morris	23	31	54	38	30	10	7	6	1				
Brennan Lake	At Brennan's Lake	Temiskaming	Miss M. Sauve	9	6	15	8	5	1	7	2					
Hunter's Point	At Hunter's Point	"	Miss A. Marcotte	14	14	28	15	8	9		1	2	5	1	2	
Long Point	At Long Point	"	Mrs. J. D. McLaren	22	14	36	20	24	3	8	1					
Temiskaming	Temiskaming	"	Miss G. Charbonneau	18	23	41	23	11	12	10	5	3				
Waswanippi	At Waswanippi	"	H. M. Alexander	21	32	53	29	40	7	6						
Fort George	At Fort George	Treaty No. 9	J. T. Griffin	25	27	52	9	51	1							
Rupert's House	At Rupert's House	"	Geo. Morrow	21	35	56	20	56								
Barriere	At Barriere	Outside Treaty	Mrs. W. T. Burns Miss H. Stearns	9	10	19	10	10	4	5						
Manawon	At Manawon	"	Miss J. Lefebvre Miss P. Drolet	27	15	42	28	42								

SCHOOL STATEMENT

STATEMENT of Indian Day Schools in the Dominion for the Fiscal Year ended March 31, 1929—*Continued*

School	Reserve	Agency	Teacher	Number on Roll			Average Attendance	Grades								
				Boys	Girls	Total		I	II	III	IV	V	VI	VII	VIII	IX
QUEBEC—*Concluded*																
Obedjiwan	At Obedjiwan	Outside Treaty	Miss F. Brunet Miss J. Lafrance	18	27	45	26	33	12	....	....	....	....	....	....	....
Weymontaching	At Weymontaching	"	Miss P. Aumond Miss W. Foy	18	12	30	17	9	13	8	....	....	....	....	....	....
Total, Quebec				761	765	1,526	1,000	719	319	201	137	83	27	18	13	9
ONTARIO																
Alnwick	Alnwick	Alnwick	Rev. H. Wilding	22	18	40	24	12	....	....	4	10	....	10	4	....
Cape Croker	Cape Croker	Cape Croker	Miss M. Moffitt	18	14	32	23	7	9	....	8	8	....	....	....	....
Port Elgin	"	"	Mrs. Sarah Bell	6	11	17	11	4	2	5	1	3	1	1	....	....
Sidney Bay	"	"	Mrs. Margaret Warder	5	8	13	8	4	1	1	....	3	2	2	....	....
Back Settlement	Caradoc	Caradoc	Miss H. M. Dingman	13	16	29	14	13	5	....	7	1	1	1	1	....
Bear Creek	"	"	Miss M. A. Baird	15	11	26	13	6	7	....	2	4	....	3	4	....
Muncey	"	"	Miss H. M. Howe	9	5	14	10	5	1	4	....	1	3	....	....	....
Oneida No. 2	Oneida	"	Miss E. L. Lowry	28	15	43	24	25	5	9	4	....	....	....	....	....
Oneida No. 3	"	"	Miss E. Duckworth	11	14	25	15	12	6	3	3	1	....	....	....	....
River Settlement	Caradoc	"	Miss L. G. Radford	8	13	21	11	6	2	....	4	....	6	3	....	....
Christian Island	Christian Island	Christian Island	R. Cowling	25	23	48	25	34	4	7	3	....	....	....	....	....
Manitou Rapids	Manitou Rapids	Fort Frances	Miss E. E. Alderson	13	14	27	8	16	9	2	....	....	....	....	....	....
Gull Bay	Gull Bay	Fort William	Miss F. Morriseau	19	15	34	33	34	....	....	....	....	....	....	....	....
Lake Helen	At Lake Helen	"	Miss E. Leusch	14	9	23	14	5	2	6	....	6	....	4	....	....
Mission Bay	Fort William	"	Miss C. M. Lavallee	7	8	15	14	5	4	3	....	3	....	....	....	....
Pic	Pic	"	Miss K. G. O'Hara	29	25	54	41	49	5	....	....	....	....	....	....	....
Sand Point	Sand Point	"	Miss C. Troy	15	13	28	19	26	2	....	....	....	....	....	....	....
Batchawana	Batchawana Bay	Garden River	Miss E. M. Robicheau	6	4	10	8	1	1	2	....	....	2	4	....	....
Garden River C. E.	Garden River	"	Miss G. Sims	8	11	19	14	16	2	1	....	....	....	....	....	....
Garden River R.C.	"	"	Miss R. Chaput Miss A. Bush	27	25	52	33	20	10	14	4	4	....	....	....	....
Goulais Bay	Goulais Bay	Fort William	...iss T. McCoy	21	13	34	21	7	11	....	5	5	5	1	....	....
Georgina Island	Georgina Island	Georgina Island	Rev. J. A. Ward	11	7	18	11	6	2	....	2	....	3	3	2	....
Golden Lake	Golden Lake	Golden Lake	Miss J. Currier	25	21	46	24	20	7	4	11	4	....	....	....	....
Sheshegwaning C.E.	Sheshegwaning	Gore Bay	Miss L. Jackson	4	4	8	5	5	....	....	1	....	....	....	....	2
Sheshegwaning R.C.	"	"	Miss M. Hickye	5	7	12	8	6	1	....	1	4	....	....	....	....
West Bay	West Bay	"	F. P. Cunningham	20	33	53	34	23	14	6	8	2	....	....	....	....
Whitefish Bay	Whitefish Bay	Kenora	D. Ducharme	15	13	28	15	8	2	5	13	....	....	....	....	....
Birch Island	Whitefish River	Manitowaning	Miss I. Malone	13	23	36	21	26	6	3	1	....	....	....	....	....
Buzwah	Buzwah	"	Miss L. Sloan	14	10	24	16	13	8	2	1	....	....	....	....	....
Kaboni	Kaboni	"	Miss M. Pleau	15	11	26	11	12	4	....	3	7	....	....	....	....
Sheguiandah	Sheguiandah	"	Mrs. A. J. Abbott	9	9	18	10	12	2	2	....	2	....	....	....	....
Sucker Creek	Sucker Creek	"	Miss J. I. Weeks	6	8	14	9	4	5	....	....	2	....	3	....	....
Whitefish Lake	Whitefish Lake	"	Miss S. M. King	5	12	17	8	4	66	1	....	2	....	3	1	....

ONTARIO—*Concluded*

Wikwemikong	Wikwemikong	"	Miss J. Charlebois Miss M. Wrinn	31	36	67	47	33	15	6	4	6	3
Moraviantown	Moravian	Moravian	Rev. C. W. McKenzie	10	21	31	20	16	7	3	5		
New Credit	New Credit	New Credit	Mrs. L. E. Tobicoe	17	7	24	14	3	3	8	4	2	3
Dokis	Dokis	Nipissing	B. Horan	16	19	35	25	17	10	2	3	3	
Garden Village	Nipissing	"	Miss L. Addey	23	22	45	19	23	12	4	6		
Temogami	Bear Island	"	Miss J. M. McDermott	14	10	24	18	9	5	8	2		
Gibson	Watha	Parry Sound	Rev. F. J. Reed	18	14	32	21	6	8	3	5	3	3
Lower French River	Lower French River	"	Miss M. Casper	8	9	17	10	13	1	1	2		
Maganetawan	Maganetawan	"	Miss B. McCarthy	6	3	9	7	5		1	1	1	1
Moose Deer Point	At Moose Deer Point	"	B. Sullivan	7	1	8	7	3	2	2	1		
Ryerson	Parry Island	"	Miss I. P. McFarland	22	9	31	17	21	3	2	2	2	1
Shawanaga	Shawanaga	"	Mrs. E. English	18	19	37	23	18	3	6	4	6	
Rama	Rama	Rama	Miss E. Willox Miss R. McKinnon	17	28	45	33	7	6	8	8	7	3
Mud Lake	Mud Lake	Rice Lake	M. Lewis Miss V. Lewis	27	23	50	34	18	11	15	6		
Kettle Point	Kettle Point	Sarnia	H. D. Watts	25	10	35	20	11	9	7	6	2	
St. Clair	St. Clair	"	W. E. Windover	19	19	38	25	21	2	11	2	2	
Stoney Point	Stoney Point	"	Miss G. E. Piggott	9	7	16	7	5	3	2	4	2	
French Bay	Saugeen	Saugeen	P. H. Gentleman	4	8	12	8	9	2	1			
Saugeen	"	"	W. M. Knechtel	13	9	22	14	10	5	4	2	1	
Scotch Settlement	"	"	Miss M. Corbett	15	9	24	17	13	6	4	1		
Six Nations No. 1	Six Nations	Six Nations	Miss J. Jamieson	21	25	46	29	9	9	9	11	8	
" 2	"	"	Miss M. Jamieson Miss N. Jamieson	34	35	69	50	13	11	13		9	12
" 3	"	"	Miss B. Garlow	29	30	59	30	20	8		4		10
" 4	"	"	Miss E. Miller	19	10	29	24	5	5	8	6	5	
" 5	"	"	Miss M. Frohman	23	20	43	21	21	3	2	7	7	2
" 6	"	"	Miss M. Hill	18	17	35	17	6	7	3	10	6	2
" 7	"	"	Miss V. Davis	27	26	53	31	16	5	9	17	5	1
" 8	"	"	Miss W. Smith	13	12	25	17	2	4	6	5		
" 9	"	"	Miss E. General	19	21	40	25	16	6	5	3	3	
" 10	"	"	Miss V. Hill	28	28	56	33	2	10	4	12	7	9
" 11	"	"	Winton Loft Garnette Atkins	48	32	80	41	20	5	5	27	9	5
Spanish River Protestant	Spanish River	Thessalon	Mrs. J. Buell	9	7	16	7	10	6				
Mississauga River	Mississauga	"	Miss M. A. McDermott	12	11	23	14	9	8	5	1		
Sagamook	Sagamook	Thessalon	Miss H. T. Connolly	7	7	14	7	7	4		3		
Serpent River	Kenabutch	"	Miss M. J. Lynch	11	19	30	22	17	5	7	1		
Abitibi	At Abitibi	Treaty No. 9	Miss M. MacBride	20	13	33	19	30	3				
Albany River	At Albany River	"	Rev. P. A. Northam	26	19	45	22	13	8	12	9	2	1
English River	At English River	"	J. T. Walker	17	22	39	34	39					
Fort Hope	At Fort Hope	"	Rev. D. Macdonald	13	7	20	9	13	5	2			
Moose Fort	At Moose Fort	"	S. Waller	21	25	46	34	30	9	6	1		
Tyendinaga Central	Tyendinaga	Tyendinaga	Miss L. M. Bell	10	13	23	16	5	3	8	3	4	
Tyendinaga Eastern	"	"	Miss N. H. Stoddart	21	22	43	26	14	8	11	4	3	3
Tyendinaga Mission	"	"	Thos. E. Emmons	14	15	29	18	12	8	7	1	1	
Tyendinaga Western	"	"	Miss E. M. John	5	9	14	8	3	2	3	5	1	
Walpole Island No. 1	Walpole Island	Walpole Island	Mrs. H. Macpherson Mrs. E. MacDougall	36	36	72	43	35		5	12	12	5
Walpole Island No. 2	"	"	Mrs. E. E. George	21	18	39	24	19	3	7	9		
Total, Ontario				1,302	1,225	2,527	1,562	1,093	403	315	305	191	87

SCHOOL STATEMENT

STATEMENT of Indian Day Schools in the Dominion for the Fiscal Year ended March 31, 1929—*Continued*

School	Reserve	Agency	Teacher	Number on Roll			Average Attendance	Grades								
				Boys	Girls	Total		I	II	III	IV	V	VI	VII	VIII	IX
MANITOBA																
Berens River (United Church)	Berens River	Clandeboye	C. D. Street	23	15	38	23	10	11	....	6	4	....	7	....	....
Berens River (R.C.)	"	"	Rev. F. Leach, O.M.I.	12	13	25	18	4	5	4	6	1	3	....	2	....
Black River	Black River	"	Geo. Slater	3	5	8	4	8	....	....	....	....	....	....	....	....
Brokenhead	Brokenhead	"	Rev. F. Longmore	14	10	24	15	18	4	....	2	....	....	....	....	....
Bloodvein	Bloodvein	"	Miss P. Fuller	10	14	24	9	9	8	2	5	....	....	....	....	....
Fort Alexander (Upper)	Fort Alexander	"	Mrs. C. R. Harbord	14	17	31	19	26	3	2	....	....	....	....	....	....
Grand Rapids	Grand Rapids	"	R. B. Horsefield	8	8	16	9	9	1	1	4	1	....	....	....	....
Hollowater River	Hollowwater River	"	E. W. Cathcart	5	20	25	12	22	3	....	....	....	....	....	....	....
Little Grand Rapids (United Church)	Little Grand Rapids	"	L. L. Schuetze	10	20	30	12	30	....	....	....	....	....	....	....	....
Little Grand Rapids (R.C.)	"	"	B. Guimond	10	12	22	9	16	5	1	....	....	....	....	....	....
Poplar River	Poplar River	"	Mrs. C. M. Caldwell	18	10	28	16	20	8	....	....	....	....	....	....	....
Fisher River	Fisher River	Fisher River	W. G. Tong Mrs. W. G. Tong	45	38	83	51	28	21	14	10	7	2	1	....	....
Jackhead	Jackhead	"	J. Everett	14	13	27	16	18	3	1	3	2	....	....	....	....
Peguis Centre	Peguis	"	Miss J. Wright	16	9	25	14	15	4	4	1	1	....	....	....	....
Peguis North	"	"	Miss N. Collen	12	15	27	17	14	....	10	3	....	....	....	....	....
Peguis South	"	"	Miss E. Lee	20	26	46	20	21	11	3	6	5	....	....	....	....
Oak River Sioux	Oak River	Griswold	Mrs. W. H. Stapleton	17	11	28	14	26	2	....	....	....	....	....	....	....
Ebb and Flow Lake	Ebb and Flow	Manitowapah	Miss C. Boychuk	16	10	26	17	14	6	3	1	2	....	....	....	....
Fairford	Fairford	"	Miss I. Fairservice Miss C. McCabe	37	33	70	39	33	17	8	9	3	....	....	....	....
Lake Manitoba	Lake Manitoba	"	Miss M. J. Sanregret Miss M. Sopchuk	9	18	27	17	14	9	3	1	....	....	....	....	....
Lake St. Martin	Lake St. Martin	"	C. Garwood	24	15	39	23	18	12	5	4	....	....	....	....	....
Little Saskatchewan	Little Saskatchewan	"	A. Wheadon	10	11	21	14	11	6	2	2	....	....	....	....	....
Pine Creek	Pine Creek	"	Rev. J. Brachet, O.M.I.	5	16	21	10	19	2	....	....	....	....	....	....	....
Shoal River	Shoal River	"	Chas. E. Cooke Mrs. C. E. Cooke	14	19	33	18	24	4	3	2	....	....	....	....	....
Waterhen River	Waterhen	"	A. D'Aoust	7	9	16	9	7	3	4	2	....	....	....	....	....
Cross Lake	Cross Lake	Norway House	N. Gaudin	14	12	26	12	16	3	2	4	1	....	....	....	....
God's Lake	God's Lake	"	P. J. Lake	6	6	12	10	2	....	2	5	3	....	....	....	....
Island Lake (United Ch.)	Island Lake	"	T. F. Cuddy	27	19	46	15	44	2	....	....	....	....	....	....	....
Island Lake (R.C.)	"	"	H. Amiard	14	13	27	13	27	....	....	....	....	....	....	....	....
Jack River (CE)	Norway House	"	Miss V. L. Blackford	20	17	37	17	15	10	3	6	1	2	....	....	....
Jack River (R.C.)	Norway House	Norway House	Sister St. Eugenie	14	15	29	17	13	6	4	6	....	....	....	....	....
Oxford House	At Oxford House	"	John Gordon	19	20	39	19	29	3	5	....	2	....	....	....	....
Rossville	Norway House	"	Miss E. Gaudin	13	14	27	16	16	3	3	3	1	....	1	....	....
York Factory	At York Factory	"	Geo. Basham	11	12	23	18	23	....	....	....	....	....	....	....	....
Big Eddy	Pas	Pas	Miss L. Millen	12	13	25	17	12	....	6	4	2	1	....	....	....
Chemahawin	Chemahawin	"	D. Banks	12	8	20	10	16	4	....	....	....	....	....	....	....
Nelson House (United Ch.)	Nelson House	"	Chas. Clay	12	22	34	13	30	2	1	1	....	....	....	....	....
Nelson House (R.C.)	"	"	Bro. R. Montpetit	9	10	19	13	15	1	3	....	....	....	....	....	....

Pas	Pas	"	Miss H. O. Searle	21	10	31	22	9	6	9	7			
Pine Bluff	Pine Bluff	"	Paul Sicotte	7	4	11	10	1	3	1	3	3		
Red Earth	Red Earth	"	J. T. Blewett	12	9	21	13	5	3	2	6	4	1	
Shoal Lake	Shoal Lake	"	F. J. Daniels	4	7	11	6	7	3	1				
Split Lake	Split Lake	"	Mrs. D. Dewdney	25	20	45	43	45						
Swan Lake	Swan Lake	Portage la Prairie	Rev. J. E. Cooper Mrs. J. E. Cooper	17	13	30	21	14	8	6	2			
Total, Manitoba				642	631	1,273	730	773	205	118	114	43	9	9	2	
SASKATCHEWAN														
Assiniboine	Assiniboine	Assiniboine	Miss F. M. Hodgson	17	20	37	18	23	6	2		6		
Little Pines	Little Pines	Battleford	Miss A. L. Cunningham Miss I. M. Faithfull	20	11	31	27	7		7	9	2	5	1
Red Pheasant	Red Pheasant	"	H. Reynolds	16	15	31	16	21	10					
Thunderchild	Thunderchild	"	Mrs. A. D. Reed	19	12	31	22	7	10	5	9			
Ahtahkakoops	Ahtahkakoops	Carlton	E. B. Goodman	17	15	32	16	21	5	2	2	2	2	
Big River	Big River	"	J. R. Settee	12	14	26	13	13	5	5	3			
Little Red River	Little Red River	"	H. W. Shaw Mrs. H. W. Shaw	5	9	14	10	12		2				
Mistawassis	Mistawassis	"	Miss S. McQueen	8	7	15	11	11	1			3		
Montreal Lake	Montreal Lake	"	J. L. Lowe	23	17	40	22	16	12	11	1			
Sturgeon Lake	Wm. Twatt's	"	Rev. F. J. Fife	10	7	17	8	7	4	3	2	1		
Fort-à-la-Corne South	James Smith	Duck Lake	Mrs. M. Burbridge	11	16	27	23	6	10	3	8			
James Smith	"	"	Rev. E. V. Bird	10	13	23	15	8	10	4	1			
John Smith	John Smith	"	Rev. G. J. Waite	10	6	16	12	7	2	3	2	1	1	
White Bear's	White Bear's	Moose Mountain	Rev. C. B. Kerr	11	7	18	11	7	6	2	3			
Whitecap Sioux	Moose Woods	Moose Woods	Mrs. A. L. Fakeley	5	7	12	8	7	3	2				
Cold Lake	Cold Lake	Onion Lake	C. P. Herbert Mrs. C. P. Herbert	12	11	23	15	10	4	4	5			
Frog Lake	Frog Lake	"	A. E. Peterson	11	9	20	8	12	3	1	4			
Long Lake	Keeheewin's	"	J. F. Dion Mrs. J. F. Dion	8	4	12	5	7	3		2			
Cote's	Cote's	Pelly	Mrs. D. R. Fraser Mrs. R. F. Roy	23	13	36	27	17	4	6	8	1		
Key's	Key's	"	W. J. D. Kerley	7	3	10	8	5	1		2	2		
Day Star's	Day Star's	Touchwood	Rev. H. G. L. Watts	9	9	18	12	8	6	3	1			
Fishing Lake	Fishing Lake	"	Rev. A. J. Lawes	7	12	19	12	10	9					
Pelican Narrows	Pelican Narrows	Treaty 10	D. C. Wickenden	11	14	25	17	25						
Stanley	Stanley	"	Miss B. B. Allcock	14	17	31	18	29	2					
Total, Saskatchewan				296	268	564	354	296	116	65	62	15	9	1		
ALBERTA														
Old Sun's	Blackfoot	Blackfoot	Rev. F. M. R. Gibney Miss C. Hauver	43	41	84	48	34	14	7	18	5	6	
Sarcee	Sarcee	Sarcee	Miss W. A. Tims	9	17	26	20	7	8	2			9	
Total, Alberta				52	58	110	68	41	22	9	18	5	15	
NORTHWEST TERRITORIES														
Fort Simpson	At Ft. Simpson	Ft. Simpson	Sr. A. Gamache	11	12	23	20	11	2	7	1	2		
Fort Smith	At Ft. Smith	Ft. Smith	Sr. Gadbois	5	5	10	7	6	3	1				
Total, Northwest Territories				16	17	33	27	17	5	8	1	2		

SCHOOL STATEMENT

STATEMENT of Indian Day Schools in the Dominion for the Fiscal Year ended March 31, 1929—*Concluded*

School	Reserve	Agency	Teacher	Number on Roll			Average Attendance	Grades								
				Boys	Girls	Total		I	II	III	IV	V	VI	VII	VIII	IX
BRITISH COLUMBIA																
Fort Babine	Fort Babine	Babine	J. F. Morrisy	13	26	39	14	12	13	10	4	....	....	....	....	....
Glen Vowell	Secevach	"	Miss A. E. Kenny	12	10	22	7	14	4	2	2	....	....	....	....	....
Hazelton	Hazelton	"	Mrs. E. Dungate	13	14	27	10	14	4	7	2	....	....	....	....	....
Kispiox	Kispiox	"	Miss E. M. Ray	18	20	38	11	35	....	....	3	....	....	....	....	....
Kitsegukla	Kitsegukla	"	Gordon J. C. Ede	14	15	29	12	23	1	2	3	....	....	....	....	....
Kitwanga	Kitwanga	"	Mrs. M. Ashmore	18	16	34	13	18	7	7	2	....	....	....	....	....
Rocher Deboule	Hagwilget	"	S. Browning Mrs. S. Browning	11	7	18	16	9	1	3	3	1	1	....	....	....
Bella Bella	Bella Bella	Bella Coola	Miss E. J. Follett	18	30	48	20	44	3	1	....	....	....	....	....	....
Bella Coola	Bella Coola	"	Mrs. I. Snodgrass	15	15	30	19	12	10	5	3	....	....	....	....	....
Kitamaat	Kitamaat	"	Miss M. McRae	29	25	54	30	32	10	5	5	2	....	....	....	....
Klemtu	Klemtu	"	Miss M. Widsten	10	12	22	11	11	....	4	3	3	1	....	....	....
Cowichan	Cowichan	Cowichan	Mrs. K. A. Fitzgerald	11	14	25	6	21	3	1	....	....	....	....	....	....
Koksilah	Koksilah	"	Miss A. M. Cliff	9	12	21	7	16	2	2	1	....	....	....	....	....
Nanaimo	Nanaimo	"	Miss E. S. Klippert	23	12	35	19	14	7	6	3	3	....	2	....	....
Songhees	Somenos	"	Miss J. Hindle	6	12	18	6	11	2	3	....	2	....	....	....	....
Shulus	Niconal Maneet	Kamloops	A. E. Fyall	7	7	14	9	9	3	2	....	....	....	....	....	....
Alert Bay	Nimkish	Kwakwelth	G. M. Luther	13	19	32	23	17	6	7	....	2	....	....	....	....
Kingcome Inlet	At Kingcome Inlet	"	Miss E. I. Dyer	21	26	47	26	44	2	1	....	....	....	....	....	....
Mamalillikulla	Mamalillikulla	"	Miss M. E. Nixon	12	15	27	12	19	7	1	....	....	....	....	....	....
Smith's Inlet	Kwashela	"	Miss W. Potter	3	6	9	8	9	....	....	....	....	....	....	....	....
Cape Mudge	Cape Mudge	"	Mrs. F. Howard	4	14	18	11	14	1	3	....	....	....	....	....	....
Boothroyd	Boothroyd	Lytton	Miss L. Blackford	7	14	21	14	8	2	3	4	4	....	....	....	....
Seabird Island	Seabird Island	"	Miss M. Wadel	9	10	19	11	13	1	2	3	....	....	....	....	....
Seton Lake	Seton Lake	"	J. T. Kieran	9	4	13	8	5	2	5	....	1	....	....	....	....
Chehalis	Chehalis	New Westminster	J. W. Burns	5	10	15	10	12	2	....	....	1	....	....	....	....
Katzie	Katzie	"	Miss M. Boeur	9	6	15	10	6	4	....	5	....	....	....	....	....
Skwah	Skwah	"	J. J. Maroney	14	13	27	13	3	6	5	5	7	1	....	....	....
Okanagan	Okanagan	Okanagan	G. S. Quigley	9	12	21	12	5	2	1	6	3	4	....	....	....
Osoyoos	Osoyoos	"	F. G. M. Grist	8	3	11	9	3	1	2	3	1	1	....	....	....
Penticton	Penticton	"	Miss C. M. MacLennan	11	5	16	8	8	3	2	2	1	....	....	....	....
Massett	Massett	Queen Charlotte	Miss A. Roode Miss D. Shopland Miss G. Lang	64	60	124	50	69	24	13	12	....	....	5	1	....
Skidegate	Skidegate	"	Miss M. B. Wright	21	19	40	28	19	15	2	2	1	1	....	....	....
Gitladamicks	Kitladamax	Skeena	Rev. H. Flores	23	21	44	21	25	1	9	8	1	....	....	....	....
Hartley Bay	Hartley Bay	"	James Oliver	12	7	19	12	10	7	2	....	....	....	....	....	....
Kincolith	Kincolith	"	Miss H. Green	27	22	49	15	40	8	....	1	....	....	....	....	....
Kitkatla	Kitkatla	"	Jas. Maguire	24	26	50	25	42	5	3	....	....	....	....	....	....
Kitselas	Kitselas	"	Chas. M. MacKinnon	9	12	21	10	12	....	5	4	....	....	....	....	....
Lakalsap	Lakalsap	"	W. W. Moore Mrs. I. Moore	23	30	53	25	42	5	5	1	....	....	....	....	....

Metlakatla	Metlakatla	"	T. A. Bryant	17	21	38	26	8	8	11	6	5	....	....
Port Essington	Port Essington	"	Miss H. J. Hare	11	18	29	16	11	4	4	7	3	....	....
Port Simpson	Port Simpson	"	Miss A. MacKay	36	42	78	39	36	14	2	14	3	5	....	4	....
			Miss M. Deane											
Homalco	Aupe	Vancouver	Arthur N. Becher	18	11	29	12	19	9	1	....	....	....	....	....	....
Sliammon	Sliammon	"	B. Nicholson	8	8	16	7	10	3	3	....	....	....	....	....	....
Squamish	Squamish	"	Sister Mary Amy	15	21	36	27	29	3	2	1	....	1	....	....	....
Ucluelet	Itedse	West Coast	D. McDevitt	15	11	26	13	21	4	1	....	....	....	....	....	....
Total, British Columbia				684	733	1,417	711	854	219	155	118	44	15	7	5	....
YUKON																
Little Salmon	At Little Salmon	Yukon	Rev. G. C. Ashbee	6	6	12	10	6	2	4	....	....	....	....	....	....
Moosehide	At Moosehide	"	Mrs. G. H. Daimpre	3	14	17	12	8	4	5	....	....	....	....	....	....
Selkirk	At Selkirk	"	W. D. Young	10	14	24	5	17	7	....	....	....	....	....	....	....
Teslin Lake	At Teslin Lake	"	J. Morris	13	10	23	15	23	....	....	....	....	....	....	....	....
Whitehorse	At Whitehorse	"	Mrs. A. M. Metcalf	3	8	11	5	8	2	1	....	....	....	....	....	....
Total, Yukon				35	52	87	47	62	15	10	....	....	....	....	....	....

SCHOOL STATEMENT

STATEMENT of Indian Residential Schools in the Dominion for the Fiscal Year ended March 31, 1929

School	Post Office Address	Agency	Principal	Denomination	Number on Roll			Average Attendance	Grades								
					Boys	Girls	Total		I	II	III	IV	V	VI	VII	VIII	IX
ONTARIO																	
Albany Mission	Fort Albany	Treaty No. 9	Rev. A. Bilodeau, O.M.I.	Roman Catholic	13	22	35	30	24	7	3	1	....	....	....	....	....
Cecilia Jeffrey	Indian Bay, Man.	Kenora	Rev. A. D. Menzies	Presbyterian	34	41	75	70	42	5	1	10	2	15	....	....	....
Chapleau	Chapleau	Chapleau	Canon A. J. Vale	Church of England	56	52	108	103	48	12	14	10	14	....	....	10	....
Fort Frances	Fort Frances	Fort Frances	Rev. H. M. Brassard, O.M.I.	Roman Catholic	37	60	97	88	35	12	19	5	13	13	....	....	....
Fort William	Fort William	Fort William	Sister M. St. George	Roman Catholic	44	47	91	58	52	4	19	11	5	....	....	....	....
Kenora	Kenora	Kenora	Rev. J. E. Baillargeon, O.M.I.	Roman Catholic	30	53	83	70	39	14	13	10	3	4	....	....	....
Mohawk	Brantford	Six Nations	S. Rogers	Church of England	53	82	135	118	9	20	21	27	27	27	4	....	....
Moose Fort	Moose Fort	Treaty No. 9	Rev. J. A. Maggrah	Church of England	15	16	31	29	16	7	7	1	....	....	....	....	....
Mount Elgin	Muncey	....	Rev. S. R. McVitty	United Church	66	81	147	142	31	32	51	22	11	....	....	....	....
McIntosh	McIntosh	Savanne	Rev. C. Perreault, O.M.I.	Roman Catholic	28	46	74	66	25	22	17	10	....	....	....	....	....
Shingwauk Home	Sault Ste. Marie	Garden River	Rev. B. P. Fuller	Church of England	46	44	90	81	14	11	14	23	16	12	....	....	....
Sioux Lookout	Sioux Lookout	Kenora	Rev. J. F. J. Marshall	Church of England	42	26	68	52	34	32	1	1	....	....	....	....	....
Spanish	Spanish	....	Rev. C. Belanger, S.J.	Roman Catholic	124	122	246	236	69	55	36	59	26	1	....	....	....
Total, Ontario	....	....	....	....	588	692	1,280	1,143	438	233	216	190	117	72	4	10	....
MANITOBA																	
Birtle	Birtle	Birtle	Rev. H. B. Currie	Presbyterian	36	53	89	82	24	10	13	10	9	6	7	8	2
Brandon	Brandon	....	Rev. T. Ferrier	United Church	73	70	143	135	49	11	13	15	19	9	15	2	10
Cross Lake	Cross Lake	Norway House	Rev. G. E. Trudeau, O.M.I.	Roman Catholic	45	55	100	87	28	17	9	27	14	5	....	....	....
Elkhorn	Elkhorn	....	Rev. F. Eley	Church of England	74	55	129	109	37	31	23	22	12	4	....	....	....
Fort Alexander	Fort Alexander	Clandeboye	Rev. L. Kalmes, O.M.I.	Roman Catholic	41	48	89	80	21	14	6	21	12	15	....	....	....
MacKay	The Pas	Pas	Rev. T. D. Conlin, Acting	Church of England	47	37	84	75	28	5	8	17	10	9	6	1	....
Norway House	Norway House	Norway House	J. T. Blackford	United Church	50	57	107	105	26	20	20	16	11	6	8	....	....
Pine Creek	Camperville	Manitowapah	Rev. J. Brachet, O.M.I.	Roman Catholic	44	46	90	82	30	10	24	11	11	4	....	....	....
Portage la Prairie	Portage la Prairie	Portage la Prairie	Rev. W. A. Hendry	United Church	44	58	102	94	15	9	14	21	17	16	9	1	....
Sandy Bay	Marius	Manitowapah	Rev. O. Chagnon, O.M.I	Roman Catholic	40	44	84	71	18	30	11	11	13	1	....	....	....
Total, Manitoba	....	....	....	....	494	523	1,017	920	276	157	141	171	128	75	45	12	12

SASKATCHEWAN															
Beauval	Beauval	Treaty No. 10	Rev. M. Adam, O.M.I.	Roman Catholic	2	27	29	25	3	10	7	3	6	....	....	....	....
Cowesses	Marieval	Crooked Lake	Rev. J. Carriere, O.M.I.	Roman Catholic	40	44	84	78	26	13	9	15	15	6	....	....	....
Duck Lake	Duck Lake	Duck Lake	Rev. H. Delmas, O.M.I.	Roman Catholic	77	76	153	148	61	24	21	20	14	13	....	....	....
File Hills	Balcarres	File Hills	Frank Rhodes	United Church	42	48	90	85	23	13	6	11	14	23	....	....	....
(1)Gordon's	Punnichy	Touchwood	Rev. M. C. T. Percivall	Church of England	55	53	108	102	35	4	9	17	26	11	4	1	1
Guy	Sturgeon Landing	....	Rev. M. Doyon, O.M.I.	Roman Catholic	64	45	109	106	29	34	33	8	5	....	....	....	....
Lac La Ronge	Lac La Ronge	Treaty No. 10	Rev. C. F. Hives	Church of England	50	72	122	100	52	14	21	13	14	8	....	....	....
Muscowequan	Lestock	Touchwood	Rev. J. Poulet, O.M.I.	Roman Catholic	37	36	73	65	13	23	13	13	10	1	....	....	....
Onion Lake, C. E.	Onion Lake	Onion Lake	Rev. H. Ellis	Church of England	44	42	86	75	22	12	10	20	15	6	1	....	....
Onion Lake, R.C.	Onion Lake	Onion Lake	Rev. L. Balter, O.M.I.	Roman Catholic	50	44	94	79	56	11	12	7	4	4	....	....	....
Qu'Appelle	Lebret	....	Rev. G. Leonard, O.M.I.	Roman Catholic	122	144	266	220	92	30	31	32	19	16	30	16	....
Round Lake	Stockholm	Crooked Lake	Rev. R. J. Ross	United Church	40	51	91	87	39	11	8	14	11	8	....	....	....
(2) St. Phillip's	St. Phillip's	Pelly	Rev. C. Brouillet, O.M.I.	Roman Catholic	22	20	42	33	27	10	4	1	....	....	....	....	....
Thunderchild	Delmas	Battleford	Rev. J. Angin, O.M.I.	Roman Catholic	51	60	111	103	21	18	15	34	15	8	....	....	....
Total, Saskatchewan					696	762	1,458	1,306	499	227	199	208	168	104	35	17	1
ALBERTA																	
Blood	Cardston	Blood	Rev. E. Ruaux, O.M.I.	Roman Catholic	57	65	122	114	44	28	10	19	12	9	....	....	....
Blue Quills	Sacred Heart	Saddle Lake	Rev. V. Gabillon, O.M.I.	Roman Catholic	38	35	73	61	26	6	12	6	17	6	....	....	....
Crowfoot	Cluny	Blackfoot	Rev. J. Riou, O.M.I.	Roman Catholic	38	36	74	65	29	15	....	11	11	8	....	....	....
Edmonton	Edmonton	....	Rev. J. F. Woodsworth	United Church	58	63	121	104	29	19	13	31	11	10	4	2	2
Ermineskins	Hobbema	Hobbema	Rev. P. P. Moulin, O.M.I.	Roman Catholic	65	59	124	118	49	21	23	10	9	12	....	....	....
Holy Angels	Fort Chippewyan	Fort Smith	Sister M. Z. Dufault	Roman Catholic	16	29	45	39	25	6	13	1	....	....	....	....	....
Lesser Slave Lake	Grouard	Treaty No. 8	Rev. W. J. Kent	Church of England	9	10	19	18	3	2	6	3	4	1	....	....	....
Morley	Morley	Stony	Rev. E. J. Staley	United Church	31	33	64	62	24	10	12	10	8	....	....	....	....
Sacred Heart	Brocket	Peigan	Rev. J. L. Levern, O.M.I.	Roman Catholic	23	30	53	48	19	3	....	18	5	8	....	....	....
St. Albert	St. Albert	....	Sister Proulx	Roman Catholic	45	78	123	107	65	11	18	12	10	7	....	....	....
St. Bernard	Grouard	Treaty No. 8	Rev. Y. M. Floch, O.M.I.	Roman Catholic	32	43	75	62	21	14	14	8	6	3	9	....	....
St. Bruno	Grouard	Treaty No. 8	Rev. J. B. H. Giroux, O.M.I.	Roman Catholic	53	61	114	98	42	8	11	21	16	16	....	....	....
St. Cyprian	Brocket	Peigan	Vivian S. Lord	Church of England	13	18	31	30	12	6	2	4	2	5	....	....	....
St. Paul's	Cardston	Blood	Canon S. Middleton	Church of England	39	87	126	112	41	17	31	5	19	5	6	2	....
Sturgeon Lake	Calais	Treaty No. 8	Rev. C. Batie, O.M.I.	Roman Catholic	57	20	77	71	29	9	16	11	2	10	....	....	....
Vermilion	Ft. Vermilion	Treaty No. 8	Rev. Jos. Habay, O.M.I.	Roman Catholic	16	11	27	16	20	1	1	1	2	2	....	....	....
Wabasca C. E.	Wabasca	Treaty No. 8	Rev. F. Longmore	Church of England	11	8	19	18	5	3	3	3	3	2	....	....	....
Wabasca R.C.	Wabasca	Treaty No. 8	Rev. A. Rault, O.M.I.	Roman Catholic	24	28	52	46	14	10	8	4	9	7	....	....	....
Whitefish Lake	Grouard	Treaty No. 8	Rev. C. D. White	Church of England	9	14	23	20	5	2	4	6	2	4	....	....	....
Total, Alberta					634	728	1,362	1,209	502	191	197	184	148	115	19	4	2

(1) Building destroyed by fire February, 1929.
(2) New school placed on per capita basis May 1, 1928.

SCHOOL STATEMENT

STATEMENT of Indian Residential Schools in the Dominion for the Fiscal Year ended March 31, 1929—*Concluded*

School	Post Office Address	Agency	Principal	Denomination	Number on Roll			Average attendance	Grades								
					Boys	Girls	Total		I	II	III	IV	V	VI	VII	VIII	IX
NORTHWEST TERRITORIES																	
Aklavik	Aklavik		Sr. A. McQuillan	Roman Catholic	28	17	45	36	18	15	12	....	....	....	.....	.....	....
Fort Resolution	Fort Resolution	Fort Resolution	Sr. J. Dussault	Roman Catholic	22	36	58	49	31	16	3	8	....	....	.....	.....	....
Hay River	Hay River	Fort Resolution	Rev. W. B. Singleton	Church of England	13	18	31	28	12	10	4	2	3	....	.....	.....	....
Providence Mission	Fort Providence	Fort Resolution	Sister Sarrasin	Roman Catholic	18	21	39	31	14	7	6	4	2	6	.....	.....	....
Total, Northwest Territories					81	92	173	144	75	48	25	14	5	6	.....	.....	....
BRITISH COLUMBIA																	
Ahousaht	Ahousaht	West Coast	Rev. W. R. Wood	United Church	25	20	45	41	12	6	4	11	7	5	.....	.....	....
Alberni	Alberni	West Coast	Rev. F. E. Pitts	United Church	52	52	104	95	38	20	25	4	11	6	.....	.....	....
Alert Bay	Alert Bay	Kwakwelth	F. Earl Anfield	Church of England	46	41	87	82	17	17	16	20	4	13	.....	.....	....
Cariboo	150 Mile House	Williams Lake	Rev. V. Rohr, O.M.I.	Roman Catholic	40	62	102	98	37	12	18	16	11	8	.....	.....	....
Christie	Kakawis	West Coast	Rev. V. Rassier, O.S.B.	Roman Catholic	44	46	90	82	36	19	13	10	9	3	.....	.....	....
Coqualeetza	Sardis	New Westminster	Rev. G. H. Raley	United Church	135	136	271	208	85	56	74	16	12	14	8	2	4
Fraser, Lake	Lejac	Stuart Lake	Rev. N. Coccola, O.M.I.	Roman Catholic	70	94	164	152	68	24	15	22	18	17	.....	.....	....
Kamloops	Kamloops	Kamloops	Rev. J. Duplanil, O.M.I.	Roman Catholic	98	110	208	167	139	41	13	13	2	....	.....	.....	....
Kitamaat	Kitamaat	Bella Coola	Mrs. S. Runacres	United Church	12	21	33	24	17	3	7	5	1	....	.....	.....	....
Kootenay	Cranbrook	Kootenay	Rev. L. Choinel, O.M.I.	Roman Catholic	36	54	90	80	19	23	12	22	8	6	.....	.....	....
Kuper Island	Kuper Island	Cowichan	Rev. J. Guerts, O.M.I.	Roman Catholic	46	51	97	83	28	24	24	9	12	....	.....	.....	....
Port Simpson	Port Simpson	Skeena	Miss L. M. Deacon	United Church	.....	19	19	17	4	4	....	5	2	3	1	.....	....
Sechelt	Sechelt	Vancouver	Rev. J. McCaffrey, O.M.I.	Roman Catholic	45	45	90	84	19	17	18	22	3	7	4	.....	....
Squamish	North Vancouver	Vancouver	Sister Mary Amy	Roman Catholic	24	28	52	52	20	6	6	4	7	9	.....	.....	....
St. George's	Lytton	Lytton	Rev. A. R. Lett	Church of England	73	72	145	127	75	10	17	20	11	4	.....	4	4
St. Mary's Mission	Mission City	New Westminster	Rev. E. Maillard, O.M.I.	Roman Catholic	61	61	122	106	39	24	39	16	2	2	.....	.....	....
Total, British Columbia					807	912	1,719	1,498	653	306	301	215	120	97	13	6	8
YUKON																	
Carcross	Carcross	Yukon	Rev. W. W. Tinney	Church of England	17	19	36	33	5	5	1	18	4	3	.....	.....	....
St. Paul's Hostel	Dawson	Yukon	C. F. Johnson	Church of England	12	18	30	29	10	5	5	3	3	4	.....	.....	....
Total, Yukon					29	37	66	62	15	10	6	21	7	7	.....	.....	....

SCHOOL STATEMENT

STATEMENT of Combined Public and Indian Day Schools in the Dominion, at which Indian Children attend, for the Fiscal Year ended March 31, 1929

School	Reserve	Agency	Number on Roll			Average attendance	Grades								
			Boys	Girls	Total		I	II	III	IV	V	VI	VII	VIII	IX
QUEBEC															
Kippewa	At Kippewa	Temiskaming	4	7	11	10	.....	3	4	2	2	.....	.....	.....	.....
Hunter's Point	At Hunter's Point	"	9	10	19	13	.....	1	3	4	.....	3	3	5	.....
Total, Quebec			13	17	30	23	.....	4	7	6	2	3	3	5	.....
ONTARIO															
Hiawatha	Near Keene	Rice Lake	4	7	11	7	2	3	3	3	.....	.....	.....	.....	.....
Honey Harbour	Near Midland	Parry Sound	9	7	16	10	7	4	2	.....	3	.....	.....	.....	.....
Mattawa	At Mattawa	Nipissing	24	28	52	41	23	9	11	5	4	.....	.....	.....	.....
Whitefish River	At Whitefish Falls	Manitowaning	6	5	11	8	9	.....	2	.....	.....	.....	.....	.....	.....
Total, Ontario			43	47	90	66	41	16	18	8	7	.....	.....	.....	.....
MANITOBA															
Moose Lake	At Moose Lake	Pas	9	8	17	9	6	4	5	2	.....	.....	.....	.....	.....
SASKATCHEWAN															
Round Plain	Near Prince Albert	Carlton	2	7	9	5	2	1	2	.....	4	.....	.....	.....	.....
BRITISH COLUMBIA															
Telegraph Creek	At Telegraph Creek	Stikine	2	6	8	4	8	.....	.....	.....	.....	.....	.....	.....	.....

SCHOOL STATEMENT

STATEMENT showing the enrolment by Provinces in the different classes of schools for the Fiscal Year ended March 31, 1929

RESIDENTIAL SCHOOLS

Province	Number of Schools	Denomination				Number on Roll			Average attendance	Percentage of attendance	Grades								
		Church of England	Presbyterian	Roman Catholic	United Church	Boys	Girls	Total			I	II	III	IV	V	VI	VII	VIII	IX
Ontario	13	5	1	6	1	588	692	1,280	1,143	89·29	438	233	216	190	117	72	4	10	.....
Manitoba	10	2	1	4	3	494	523	1,017	920	90·46	276	157	141	171	128	75	45	12	12
Saskatchewan	14	3	.....	9	2	696	762	1,458	1,306	89·57	499	227	199	208	168	104	35	17	1
Alberta	19	5	.....	12	2	634	728	1,362	1,209	88·76	502	191	197	184	148	115	19	4	2
Northwest Territories	4	1	.....	3	.....	81	92	173	144	83·23	75	48	25	14	5	6	.....	.....	.....
British Columbia	16	2	.....	9	5	807	912	1,719	1,498	87·14	653	306	301	215	120	97	13	6	8
Yukon	2	2	.....	.....	.....	29	37	66	62	93·93	15	10	6	21	7	7	.....	.....	.....
Total, Residential Schools	78	20	2	43	13	3,329	3,746	7,075	6,282	88·79	2,458	1,172	1,085	1,003	693	476	116	49	23

DAY SCHOOLS

Province	Number of Schools	Number on Roll			Average attendance	Percentage of attendance	Grades								
		Boys	Girls	Total			I	II	III	IV	V	IV	VII	VIII	IX
Prince Edward Island	1	11	18	29	19	65·51	12	7	4	3	3	.....	.....	.....	.....
Nova Scotia	11	130	137	267	151	56·55	105	53	38	32	17	10	9	3	.....
New Brunswick	10	145	140	285	200	70·17	84	58	32	48	28	19	8	8	.....
Quebec	31	761	765	1,526	1,000	65·53	719	319	201	137	83	27	18	13	9
Ontario	79	1,302	1,225	2,527	1,562	61·81	1,093	403	315	305	191	87	75	56	2
Manitoba	44	642	631	1,273	730	57·34	773	205	118	114	43	9	9	2	.....
Saskatchewan	24	296	268	564	354	62·76	296	116	65	62	15	9	1	.....	.....
Alberta	2	52	58	110	68	61·81	41	22	9	18	5	15	.....	.....	.....
Northwest Territories	2	16	17	33	27	81·81	17	5	8	1	2	.....	.....	.....	.....
British Columbia	45	684	733	1,417	711	50·17	854	219	155	118	44	15	7	5	.....
Yukon	5	35	52	87	47	54·02	62	15	10	.....	.....	.....	.....	.....	.....
Total, Day Schools	254	4,074	4,044	8,118	4,869	59·97	4,056	1,422	955	838	431	191	127	87	11

COMBINED WHITE AND INDIAN SCHOOLS

Quebec	2	13	17	30	23	76·66	.....	4	7	6	2	3	3	5	.....
Ontario	4	43	47	90	66	73·33	41	16	18	8	7	.....	.....	.....	.....
Manitoba	1	9	8	17	9	52·92	6	4	5	2	.....	.....	.....	.....	.....
Saskatchewan	1	2	7	9	5	55·55	2	1	2	.....	4	.....	.....	.....	.....
British Columbia	1	2	6	8	4	50·00	8	.....	.....	.....	.....	.....	.....	.....	.....
Total, Combined Schools	9	69	85	154	107	69·48	57	25	32	16	13	3	3	5	.....

SUMMARY OF SCHOOL STATEMENT

Province	Class of Schools			Total Number of Schools	Number on Roll			Average attendance	Percentage of attendance	Grades								
	Day	Residential	Combined		Boys	Girls	Total			I	II	III	IV	V	VI	VII	VIII	IX
Prince Edward Island	1	.....	.....	1	11	18	29	19	65·51	12	7	4	3	3	.....	.....	.....	.....
Nova Scotia	11	.....	.....	11	130	137	267	151	56·55	105	53	38	32	17	10	9	3	.....
New Brunswick	10	.....	.....	10	145	140	285	200	70·17	84	58	32	48	28	19	8	8	.....
Quebec	31	.....	2	33	774	782	1,556	1,023	65·74	719	323	208	143	85	30	21	18	9
Ontario	79	13	4	96	1,933	1,964	3,897	2,771	71·10	1,572	652	549	503	315	159	79	66	2
Manitoba	44	10	1	55	1,145	1,162	2,307	1,659	71·91	1,055	366	264	287	171	84	54	14	12
Saskatchewan	24	14	1	39	994	1,037	2,031	1,665	81·97	797	344	266	270	187	113	36	17	1
Alberta	2	19	.....	21	686	786	1,472	1,277	86·75	543	213	206	202	153	130	19	4	2
Northwest Territories	2	4	.....	6	97	109	206	171	83·00	92	53	33	15	7	6	.....	.....	.....
British Columbia	45	16	1	62	1,493	1,651	3,144	2,213	70·38	1,515	525	456	333	164	112	20	11	8
Yukon	5	2	.....	7	64	89	153	109	71·24	77	25	16	21	7	7	.....	.....	.....
Total	254	78	9	341	7,472	7,875	15,347	11,258	73·55	6,571	2,619	2,072	1,857	1,137	670	246	141	34

INDIAN LAND STATEMENT

SHOWING the Number of Acres of Indian Lands Sold during the year ended the 31st March, 1929, the total amount of purchase money realized and the quantity of land unsold at that date.

ONTARIO

Town or Township	County or District	Number of Acres Sold	Amount of Sale	Number of Acres Unsold	Remarks
			$ cts.		
Albermarle	Bruce			88·0	
Eastnor	"			358·0	
Lindsay	"			489·0	
St. Edmunds	"			206·0	
Bury (Townplot)	"	11·01	65 00	108·62	Some of these lands
Oliphant	"			40·0	were resumed by
Southampton (Townplot)	"			2·0	the Department,
Wiarton (Townplot)	"			8·05	the conditions of
Islands Saugeen Peninsula	"			160·05	sale not being com-
White Cloud Island	Grey			7·0	plied with, so
Thessalon (Townplot)	Algoma			11·80	that in certain
Thessalon	"	224·96	341 36		cases there appears
Havilland	"			718·0	to have been
Aweres	"	80·0	20 00		more land re-
Apaquash	"			11·23	maining unsold at
Laird	"	475·50	415 73	1,118·0	the close of the
Fenwick	"	80·0	20 00		past fiscal year
Vankoughnet	"			426·0	than remained
Kehoe	"			143·37	unsold according
Pennefather	"	413·0	143 75		to the previous
Campbell	Manitoulin			275·0	year's report.
Carnarvon	"	41·0	8 60	503·0	
Howland	"			745·0	
Sheguiandah (Townplot)	"	108·0	48 50		
Manitowaning (Townplot)	"			14·33	
Tehkummah	"	163·0	34 80	1,177·0	
Allan	"	123·0	186 35	165·0	
West Bay	"			8,244·07	
Billings	"	29·0	10 00	83·0	
Bidwell	"	584·0	85 00		
Assiginack	"	111·0	22 50		
Barrie Island	"			2·0	
Gordon	"	42·0	21 00		
Gore Bay (Townplot)		0·50	34 00		
Burpee	"	498·0	391 25		
Tolsmaville	"			968·88	
Mills	"	313·0	77 00	29·0	
Dawson	"	323·0	160 00	3,855·0	
Robinson	"	1,079·0	314 55	180·0	
South Baymouth (Townplot)	"	2·49	126 20	130·51	
Meldrum (Townplot)	"	1·0	115 25	75·19	
Cayuga (Townplot)	Haldimand			33·36	
Caledonia (Townplot)	"			50·0	
Shannonville (Townplot)	Hastings			0·39	
Thurlow	"			130·0	
Deseronto (Townplot)	"			4·40	
Tyendinaga (Townplot)	"			380·0	
Bedford	Frontenac			193·0	
Wild Land Reserve	Rainy River	647·94	1,700 85	1,696·79	
Long Sault Reserve	"	92·28	276 84	105·98	
Paskonkin Reserve				162·0	
Little Forks				82·43	
Beaucage	Nipissing	123·68	371 04	1,168·74	
Commanda	"	931·00	4,159 81	18,637·58	
Pedley				2,720·38	
Islands in Georgian Bay	Prov. of Ontario	0·65	25 00		
Islands in Otonabee Waters	Peterborough	0·36	100 00		
		6,495·37	9,274 38	30,603·63	

INDIAN LAND STATEMENT

SHOWING the Number of Acres of Indian Lands Sold during the year ended the 31st March, 1929, the total amount of purchase money realized and the quantity of land unsold at that date.—*Continued.*

QUEBEC

Town or Township	County or District	Number of Acres Sold	Amount of Sale	Number of Acres Unsold	Remarks
			$ cts.		
Ouiatchouan	Lake St. John			3,917·14	
Dundee	Huntingdon			4,057 74	
Maniwaki (Townplot)	Ottawa			39·61	
Temiscamingue	Temiskaming			1,728·59	
Quarante Arpents	Quebec			19·0	
				9,762·08	

NEW BRUNSWICK

Tabusintac	Northumberland			* 953·0	
Tobique	Victoria			283·0	
				1,236·00	

MANITOBA

The Pas			37,155 00		

SASKATCHEWAN

Little Black Bear		4,636·0	55,522 00		
Highgate Townplot			5,740 00		
Lestock	Humboldt		130 00	7·86	
Muscowequan	"	321·0	2,247 00	5,813·93	
Little Bone	"	55·69	167 07	4,040·59	
Kamsack	"			3·11	
Crooked Lakes	"	796·0	9,461 72	3,044·0	
Muscowpetung	Assiniboia			1,403·0	
Lakeview Townplot	"	1·60	340 00	97·39	
Last Mountain, No. 80A	"			1,207·50	
Assiniboine	"			318·0	
Pasqua	"			335·85	
Kylemore	Humbolt			19·39	
Fishing Lake	"			618·30	
Moosomin and Thunderchild	West Sask	702·0	2,716 00	4,378·00	
Grizzly Bear and Lean Man	Humbolt				
Key and Keeseekoose	"	480·0	2,720 00	151·0	
		6,992·29	79,034 79	21,437·92	

INDIAN LAND STATEMENT

SHOWING the Number of Acres of Indian Lands Sold during the year ended the 31st March, 1929, the total amount of purchase money realized and the quantity of land unsold at that date.—*Concluded.*

ALBERTA

Town or Township	County or District	Number of Acres Sold	Amount of Sale	Number of Acres Unsold	Remarks
			$ cts.		
Wabamun Reserve	North Alberta	.....	.....	1,486·00	
Wabamun (Townplot)	"	.....	.....	456·13	
Bobtail & Samson	"	480	10,400 00	343·0	
Louis Bull	"	.....	.....	689·0	
Duffield (Townplot)	.....	.....	195 00	104·32	
Michel	"	4,658·0	65,233 00	.....	
Stony Plain	"	.....	.....	0·02	
Peigan	South Alberta	480·0	9,600 00	13,214·00	
Sarcee	"	.....	.....	6,650·00	
Blackfoot	"	616·0	2,761 00	7,241·82	
		6,234·00	88,189 00	30,184·29	

BRITISH COLUMBIA

Thompson Res. No. 1	Kamloops District.	3·44	215 00	.....
Kamloops Res. No. 1	"	6·89	861 25	.....
Slosk Res. No. 1	Lillooet District	7·92	277 20	.....
Kaikalahun Res. No. 25	New Westminster District.	0·50	150 00	.....
		18·75	1,503 45	

GENERAL REMARKS

The land sold during the year amounted to 19,740.41 acres, which realized $204,387.79. The quantity of surrendered land in the hands of the department was approximately 229,129.23 acres. The principal outstanding on account of Indian lands sold amounted to $1,385,607.82, a considerable portion of which has not yet become due.

CIVIL GOVERNMENT, 1928-29

Vote	Grant	Expenditure	Grant not used	Grant exceeded
	$ cts.	$ cts.	$ cts.	$ cts.
Salaries	171,992 50	170,500 97	1,491 53	.....
Contingencies	20,000 00	19,909 90	90 10	.....
Balance unexpended	.....	.....	.....	1,581 63
	191,992 50	190,410 87	1,581 63	1,581 63

APPROPRIATION ACCOUNTS, 1928-29

Vote	Grant	Expenditure	Grant not used	Grant exceeded
	$ cts.	$ cts.	$ cts.	$ cts.
Civil Government	191,992 50	190,410 87	1,581 63	
Annuities	218,000 00	217,231 00	769 00	
Nova Scotia	82,960 00	82,943 17	16 83	
New Brunswick	67,824 00	67,820 62	3 38	
Prince Edward Island	6,255 00	6,243 06	11 94	
Ontario and Quebec	365,185 20	365,103 03	82 17	
Manitoba, Saskatchewan, Alberta and Northwest Territories	928,257 00	927,548 56	708 44	
British Columbia	468,180 00	468,122 35	57 65	
Yukon	19,000 00	16,506 62	2,193 38	
General	231,500 00	231,361 81	138 19	
Indian Education	2,217,160 00	2,215,411 98	1,748 02	
	4,796,313 70	4,788,703 07	7,610 63	
Miscellaneous Gratuities		800 00		
Special Account	26,614 60	4,697 03	21,917 57	
Annuities—				
Treaty 9		56 00		
Robinson Treaty	218,000 00	6,000 00	769 00	
Manitoba, Saskatchewan, Alberta and Northwest Territories		211,175 00		
Balance unexpended				769 00
	218,000 00	217,231 00	769 00	769 00
Nova Scotia—				
Salaries	6,360 00	6,399 99		39 99
Relief	30,000 00	33,869 02		3,869 02
Medical	25,000 00	20,165 77	4,834 23	
Miscellaneous	14,600 00	14,936 76		336 76
Agriculture and seed	1,500 00	1,644 55		144 55
Repairs to roads and dyking	5,500 00	5,927 08		427 08
Grant not used				16 83
	82,960 00	92,943 17	4,834 23	4,834 23
New Brunswick—				
Salaries	4,374 00	3,462 50	911 50	
Relief	27,000 00	39,176 98		12,176 98
Medical	11,700 00	12,016 40		316 40
Miscellaneous	23,300 00	11,591 29	11,708 71	
Agriculture and seed	1,000 00	1,330 36		330 36
Repairs to roads	450 00	243 09	206 91	
Grant not used				3 38
	67,824 00	67,820 62	12,827 12	12,827 12
Prince Edward Island—				
Salaries	1,080 00	960 00	120 00	
Relief and seed	2,675 00	3,049 10		374 10
Medical	1,850 00	1,833 96	16 04	
Miscellaneous	350 00	250 00	100 00	
Roads	300 00	150 00	150 00	
Grant not used				11 94
	6,255 00	6,243 06	386 04	386 04
Ontario and Quebec—				
Relief	140,032 00	159,275 80		19,243 80
General expenses	112,775 00	100,118 55	12,656 45	
Roads and bridges	83,300 00	77,219 54	6,080 46	
Clearing land and purchase stock	1,000 00	410 94	589 06	
Provide expenses *re* prosecution of Cayuga claims against U.S.A	28,078 20	28,078 20		
Grant not used				82 17
	365,185 20	365,103 03	19,325 97	19,325 97

APPROPRIATION ACCOUNTS, 1928-29—*Continued*

Vote	Grant	Expenditure	Grant not used	Grant exceeded
	$ cts.	$ cts.	$ cts.	$ cts.
Manitoba, Saskatchewan, Alberta and Northwest Territories—				
Implements	27,612 00	21,506 37	6,105 63	
Seed	17,013 00	9,280 43	7,732 57	
Cattle	2,150 00	3,186 08		1,036 08
Destitute	203,450 00	208,359 06		4,909 06
Medical	290,560 00	317,362 33		26,802 33
Triennial clothing	4,710 00	5,103 48		393 48
Surveys	8,000 00	9,064 56		1,064 56
Sioux	14,145 00	13,423 26	721 74	
Mills	1,194 00	54 80	1,139 20	
General expenses	354,423 00	337,253 05	17,169 95	
Roads	5,000 00	2,955 14	2,044 86	
Balance unexpended				708 44
	928,257 00	927,548 56	34,913 95	34,913 95
British Columbia—				
Relief	45,000 00	76,899 39		31,909 39
Medical	107,480 00	154,223 05		46,753 05
Farming	9,950 00	10,159 86		209 86
General expenses	148,000 00	138,742 83	9,277 17	
Surveys, irrigation and roads	57,750 00	52,418 53	5,331 47	
Special grant	100,000 00	35,678 69	64,321 31	
Grant not used				57 65
	468,180 00	468,122 35	78,929 95	78,929 95
Yukon—				
Relief and medical	15,000 00	13,287 55	1,712 45	
General expenses	4,000 00	3,219 07	780 93	
Balance unexpended				2,493 38
	19,000 00	16,506 62	2,493 38	2,493 38
General—				
Surrender of land	50,000 00	8,800 00	41,200 00	
Relief	100,000 00	64,397 70	35,602 30	
Tuberculosis	50,000 00	113,123 33		63,123 33
Printing and stationery	5,000 00	7,360 73		2,360 73
Surveys	6,000 00	2,200 78	3,799 22	
Assist to T.F.A/C 310	3,000 00	1,000 00	2,000 00	
Smallpox and other diseases	10,000 00	24,122 66		14,122 66
Registration fees	500 00	209 00	291 00	
Legal	7,000 00	10,147 61		3,147 61
Grant not used				138 19
	231,500 00	231,361 81	82,892 52	82,892 52
Indian Education	2,217,160 00	2,215,411 98	1,748 02	
	2,217,160 00	2,215,411 98	1,748 02	
Miscellaneous Gratuities		800 00		
		800 00		
Special Account	26,614 60	4,697 03	21,917 57	
	26,614 60	4,697 03	21,917 57	

INDIAN TRUST FUND

SHOWING transactions in connection with the Fund during the year ended March 31, 1929

Service	Debit	Credit
	$ cts.	$ cts.
Balance March 31, 1928		13,203,366 84
Collections, on land sales, timber and stone dues, rents, fines and fees		1,047,297 57
Interest for the year ending March 31, 1929		671,066 78
Legislative grants to supplement the funds		7,000 00
Outstanding cheques, 1926–27		100 90
Expenditure during the year	1,299,428 35	
Balance March 31, 1929	13,629,403 74	
	14,928,832 09	14,928,832 09

DOMINION OF CANADA

REPORT

OF THE

DEPARTMENT OF MINES

FOR THE

FISCAL YEAR ENDING MARCH 31, 1929

OTTAWA
F. A. ACLAND
PRINTER TO THE KING'S MOST EXCELLENT MAJESTY
1929

No 2217

To General His Excellency the Right Honourable Viscount Willingdon, G.C.S.I., G.C.M.G., G.C.I.E., G.B.E., Governor General and Commander in Chief of the Dominion of Canada.

MAY IT PLEASE YOUR EXCELLENCY:

The undersigned has the honour to lay before Your Excellency, in compliance with 6-7 Edward VII, chapter 29, section 18, the report of the work of the Department of Mines, for the fiscal year ending March 31, 1929.

CHARLES STEWART,
Minister of Mines.

94008—1½

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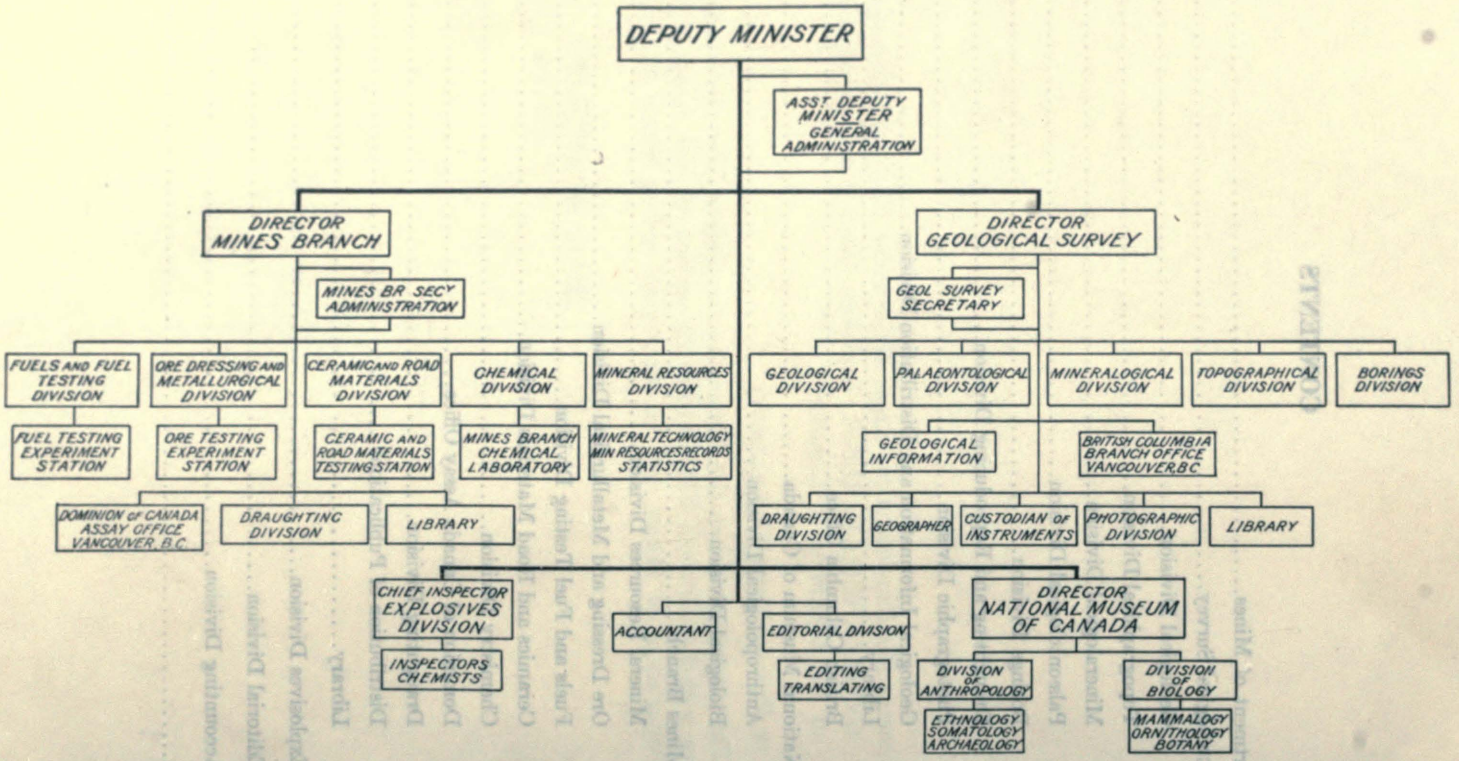
ORGANIZATION CHART

DEPARTMENT OF MINES



REPORT

OF THE

DEPARTMENT OF MINES

FOR THE FISCAL YEAR ENDING MARCH 31, 1929

To the Hon. CHARLES STEWART,
Minister of Mines,
Ottawa.

SIR,—I have the honour to submit, in accordance with the requirements of Parliament, the Annual Report of the Department of Mines for the year ending March 31, 1929.

The growth of the mining and metallurgical industries, which has been so prominent a feature in the economic development of the Dominion in recent years, continued during the year under review and, as in the past few years, the demands for technical advice on problems arising in the development of our mineral resources have continued to increase both in number and variety. Field and laboratory investigations by the scientific and technical branches of the department have been extended to meet these conditions as far as available facilities have permitted, and the foundations laid for greater expansion within the next few years. The increasing importance of mining in the industrial life of the country is each year becoming more evident and, although a large amount of scientific and technical research is already being carried on both by the Dominion and Provincial governments to further the development of mining, still broader efforts must be made to secure for Canada the greatest benefit from this important source.

The functions of the various branches and divisions of the Department, and the more important operations carried on during the year, are summarized below by the heads of each branch and division. As in the past, the special attention paid to the immediate and more urgent requirements of the mining and metallurgical industries has taken up almost the entire time and facilities available in 1928-29. Progress was made, however, towards the completion of the new Fuel Research Laboratories building in Ottawa, which was ready for occupancy in the early part of 1929-30. A commencement was made on the construction and equipment of a pyro-metallurgical laboratory for research investigations on iron ores, ferro alloys, and their products, and it is anticipated that the work to be undertaken in this laboratory will afford material assistance to the Canadian iron and steel industry. During the year a preliminary investigation was undertaken by the Geological Survey to ascertain the practicability of the various types of apparatus for electrical and electro-magnetic prospecting now being used in Canada and the United States. This investigation has been continued and expanded in 1929-30.

During the year the Geological Survey had fifty-three field parties engaged in geological and topographical mapping and related work, operating in widely separated parts of the Dominion. Other investigations of economic and scientific interest were carried on in different parts of the country by the Mines

Branch and the National Museum of Canada. Laboratory investigations embraced a wide range of subjects in the fields of mineralogy and petrography, well-borings, ore-dressing and metallurgy, fuel testing, ceramics, and road materials. The work in fuel testing has been marked during the year by a revival of interest in the possibilities of pulverized fuels, and equipment is being provided in the new Fuel Research Laboratories to permit of a variety of tests being made with Canadian fuels. Peat manufacturing experiments were conducted at Alfred, Ontario, as planned, to determine the feasibility of manufacturing peat fuel on a commercial basis, but were handicapped by the abnormally heavy rainfall during the field season.

As in former years, the general policy of co-operation with other departments of the Dominion and of provincial Governments, with the development branches of the railway companies and other Canadian organizations interested in the development of our natural resources, has been maintained. Close co-operation with such organizations is beneficial in many ways, notably in eliminating the danger of duplication and overlapping. The investigations usually undertaken by the Department differ distinctly from those conducted by other bodies, but where similar work is carried on—as in some of the universities, the provincial mines organizations, and the National Research Council—every effort is made to co-ordinate the work of the Department with that of these various bodies. The fundamental principle governing this matter lies in the fact that an organization such as a federal department can continually employ a greater number of specialists than the smaller local organizations, and because of the greater territory within its sphere of operations, the larger staff can always be kept busy. Moreover, the mineral industry presents, at all times, aspects of vital national concern upon which the Dominion Government must keep informed, and a considerable share of the investigations undertaken by the Department are of interest and practical value outside the province in which they may be made. Close co-operation was maintained during the year with the Imperial Institute (London), the British Department of Scientific and Industrial Research, the United States Department of Commerce at Washington, and with certain scientific and technical societies in the United States.

The Deputy Minister, in addition to his administrative duties, devoted a considerable part of his time to other duties devolving upon him as chairman or member of the following official bodies: Council of the Northwest Territories; Dominion Fuel Board; Canadian Committee of the World Power Conference; Advisory Committee on Mining Regulations; National Research Council and several of its associate committees; Niagara Board; Advisory Committee on Minerals of the Imperial Institute. Meetings of each of these bodies were held during the year. The work of the Niagara Board to determine means by which the scenic beauty of the falls and rapids of Niagara can be best maintained and the quantity of water that may be diverted consistently therewith was completed by the signing, on January 2, 1929, at Ottawa, of the treaty between the Dominion of Canada and the United States of America on this important matter. Contact with current mining developments throughout the Dominion was maintained during the year. For this purpose visits were made by the Deputy Minister to mining and metallurgical centres throughout the country, including an extensive tour in the autumn to examine important developments in western Canada. In June, 1928, the Assistant Deputy Minister visited districts in Nova Scotia in which coal and metal mining is being carried on.

The mining newsletter service prepared primarily for distribution from the High Commissioner's Office in London, is now in its sixth year and has proved an excellent medium for the presentation overseas of news concerning Canada's mining industry. This fortnightly service reaches some four hundred selected recipients in the United Kingdom and on the Continent, including the more

important mining, banking, and investment houses, and the trade and technical periodicals. The articles are widely reproduced and help to sustain interest in Canadian mining matters. The titles of the twenty-nine articles dispatched during the year will be found on page 8.

Although the results of all major investigations conducted by the Department are published in the form of summary reports of investigations, special bulletins, maps, memoirs, etc., much information of scientific, technical, and current interest dealing with or related to the work of the Department is also disseminated through the technical and public press, and by means of addresses given by members of the staff. A selection of these papers and addresses is listed on pages 6 to 8. The lectures on our natural resources, which have become a feature of the museum work in Ottawa during the winter months, were continued during the winter of 1928-29 and were again favourably received.

Canada's mining industry has seldom shown such phenomenal growth as in 1928, during which the previous high mineral records of 1926 and 1927 were far surpassed. The value of the total mineral output of the Dominion for 1928 is estimated at $275,000,000, nearly 11·2 per cent over the 1927 output, with advances featuring all fields of production. Canada's mining industry, it is said, now represents a capital investment of more than $700,000,000 and employs 85,000 workers in mining operations and associated enterprises. Outstanding features during the year include a considerable increase in the copper and gold output as a result of the first year's operations of the Horne (Noranda) mine and smelter in western Quebec; the far-reaching developments proceeding in the copper-nickel industry of Sudbury district; the exploitation of the very large, low-grade copper-zinc-lead ore-bodies that enrich the central Manitoba-Saskatchewan boundary region; the further development of the oil and gas fields of the western provinces, notably in Turner valley, Alberta; and the increased activity, both in mining and metallurgy, in British Columbia.

The various developments in metallic mining have resulted, during the past year, in attracting wide attention to Canada's large base-metal resources. Copper is the outstanding factor in this field, production in 1928 amounting to over 100,000 tons, an advance of more than one-third over the 1927 output. A similarly large increase was shown in the production of nickel, and important advances were made in the output of lead and zinc. Although these advances are in themselves very satisfactory, it is most significant that, of the more important base-metal discoveries now in process of development, one property only (the Horne mine) has reached the stage of uninterrupted production. The making of a mine in new territory involves not only actual mining development, but also in many cases the building of railways, harnessing of waterpower and erection of transmission lines, and the construction of concentrating or smelting plants. Recent railway construction and power developments in mining territory have exceeded all earlier records, but the processes take time, and years pass before mines can be productive. The output from the more important properties which are expected to commence operations within the next two years will undoubtedly add materially to Canada's total production of these increasingly important metals.

The various major enterprises in railway construction, hydro development, and mining and metallurgical activity proceeding simultaneously in widely separated sections of the Dominion presage a period of wide and intensive mineral development evidently much greater than anything yet experienced in Canada. Future development will undoubtedly be accelerated to a degree hitherto unknown because of the fact that, concurrently with the advances recently made in mining and metallurgy and in methods of railroad building, the science of aviation has reached a stage that enables it virtually to revolutionize prospect-

ing in vast reaches of territory otherwise difficult of access and in which development has heretofore been necessarily slow and laborious. Only those in close contact with field operations in the more remote districts fully realize the important part being played by the airplane. It is difficult to exaggerate the importance of the factor which has reduced distance, hitherto the chief obstacle in the way of mineral development, to terms of flying hours.

As a result of these important developments, an entirely new situation is arising. Up to the present, with very few exceptions, no difficulties have been experienced in finding readily available markets, either at home or abroad, for our entire mineral output. It would seem, however, that mining in Canada will henceforth feature a largely increased output of copper, lead, and zinc. In the last five years the production of copper and lead has been almost doubled, and that of zinc nearly trebled. The present output of these metals is far in advance of domestic requirements and the trend of current developments is to compel Canadian producers to find foreign markets for their products. In 1923 our total exports of non-ferrous metals and their products fell below $50,000,000. Last year they exceeded $112,000,000. Not so many years ago the United Kingdom and the United States absorbed almost the entire exportable surplus of these metals, and though sales to the United States and the United Kingdom have continued to increase Canadian producers have had, to a steadily increasing extent, to enter markets outside of these countries. In the past five years our exports of non-ferrous metals to these "Other Countries" rose from $12,000,000 to more than $32,000,000.

Dominion Fuel Board

During the year, eleven meetings of the Dominion Fuel Board were held, at which twenty-one subjects appeared on the agenda. A number of sub-committees of the Board also met during this period.

An important part of the work related to Orders in Council of March 16, 1928 (P.C. 439), and of March 30, 1928 (P.C. 539), regarding test movements of Canadian coals from eastern and western Canada to the provinces of Ontario and Quebec, and to the provisions of the latter Order in Council so far as it relates to inland rail shipments of water-borne coal. Competition of foreign coals at the different points in Ontario and Quebec has a direct bearing upon the application of these dispositions, and the situation consequently necessitated a great deal of investigation by the board.

During the year forty-five applications were received under the Order in Council of March 30, 1928 (P.C. 539). The board dealt with applications covering 431,000 tons of coal.

Rail shipments of coal from Nova Scotia to points in the province of Quebec amounted to some 75,000 tons during the period December 15, 1928, to April 1, 1929. This was very helpful to the Canadian coal industry in retaining winter markets.

At the request of the New Brunswick Government a survey of the consumption and distribution of coals used in that province was carried out by the Fuel Board. This is the first time complete information of this nature has been made available.

In the summer of 1928 the chairman and secretary of the board visited the coal fields of both eastern and western Canada to maintain contact with modern mining conditions and with problems related to the transportation and marketing of coal. The board will continue to keep in close touch with this phase of the fuel situation.

Inspection of the construction of a coking plant under the terms of the Domestic Fuel Act, 1928, was made by the board as construction progressed during the year. The results of an investigation initiated by the board during the year of the comparative costs of house heating by coal, fuel oil, and city gas, will soon be available for publication.

The Mineral Resources Division of the Department of Mines again conducted for the Fuel Board the annual survey of domestic fuel consumption in Ontario and Quebec, and in the year under review extended the survey to cover also the province of Manitoba. The board continued the distribution throughout Ontario and Quebec of printed cards and pamphlets showing correct methods of burning coke and other fuels displacing imported anthracite. An increased use of fuels displacing American anthracite was again recorded.

During the year the board published its second progress report, covering operations 1923-28. This summarized the investigations conducted by the board with respect to Canada's fuel problems, reviewed the changes which the fuel situation has undergone during this period, and pointed to the possibilities arising through technical investigation and research for the more efficient and diversified uses of coal. A third edition of 25,000 copies of the board's pamphlet on house insulation was issued during the year to meet the public demand. A companion pamphlet dealing with humidity in houses has also been published.

Statements and information on various phases of the fuel situation were prepared by the board for use by the Advisory Board on Tariff and Taxation, other government departments, and various Canadian coal-mining interests. A great many requests from the public for information respecting fuel and the fuel situation were received. Press articles and addresses on the fuel situation were included in the year's activities.

The Natural Resources Intelligence Service, the Mines Branch, the Geological Survey, the Dominion Water Power and Reclamation Service, and the Dominion Bureau of Statistics freely co-operated with the board.

Your obedient servant,

CHARLES CAMSELL,
Deputy Minister.

OTTAWA, September 30, 1929.

List of Papers and Addresses

NOTE.—Lists of the papers prepared and addresses delivered during the year by members of the staffs of the Divisions of Anthropology, Biology, and Mineralogy are to be found in the Annual Report of the Director, National Museum of Canada.

General

Recent Developments in the Canadian Mining and Metallurgical Industries, by Hon. Charles Stewart. Edmonton Journal Special Mining Supplement, November 29, 1928.

The Outlook for Canada's Mining Industries, by Hon. Charles Stewart. Northern Miner, Toronto, Exploration Number, February, 1929.

Canadian Mining Operations Expand, by Charles Camsell. Financial Times (London), Second Canadian Resources Supplement, June 4, 1928.

The Status of the Canadian Mining Industry, by Charles Camsell. Canadian Progress, 1928.

Noteworthy Progress in Canadian Mining Operations, by Charles Camsell. The Empire Mail, August, 1928.

Canada's Growing Mining Industries, by Charles Camsell. Winnipeg Tribune Financial and Mining Review, October 19, 1928.

The Mining Industries of Canada, by Charles Camsell. Financial Times (London), Third Canadian Resources Supplement, November, 1928.

Mining Progress, by Charles Camsell. Montreal Herald National Number, 1928.

The Mineral Industry in Canada's Growth, by Charles Camsell. Journal of Commerce (New York), January 10, 1929.

Our Northland, by Charles Camsell. Peterborough Branch, Engineering Institute of Canada, January 24, 1929.

The Influence of Metals on Canadian History and Development, by Charles Camsell. Queen's University and Toronto University, March, 1929.

Canada's Mining Industry in 1928, by L. L. Bolton. Montreal Gazette Commercial and Financial Review, January, 1929.

How the Department of Mines Serves the Public, by L. L. Bolton. Canadian Institute of Mining and Metallurgy, Winnipeg, March, 1929.

Canada North of 56 Degrees, by E. M. Kindle. Yale Scientific Magazine, May, 1928. Canadian Field Naturalist, vol. XLII, No. 3, April, 1928.

Geology, Mining, and Mineral Resources

Economic Geology of Canada, 1927, by Wyatt Malcolm and P. J. Moran. Canada Year Book, Ottawa.

Present Status and Future Possibilities of the Mining Industry in British Columbia, by Victor Dolmage. Bulletin of the Imperial Institute, London, vol. XXVI, No. 1, 1928.

Mining Opportunities in Northern British Columbia, by F. A. Kerr. Financial News (Vancouver), January, 1929.

The Keewatin Iron Formations, by W. H. Collins. Fennia (Helsingfors), vol. 50, 1929.

A General Summary of Observations on the Sulphide Deposits of Northern Quebec, by H. C. Cooke and W. F. James. Canadian Mining Journal, August 31, 1928.

Ore Relations at the Horne and Aldermac Mines, Quebec, by H. C. Cooke. Canadian Mining and Metallurgical Bulletin, October, 1928.

Gaspe Peninsula, Its Geology and Mineral Possibilities, by F. J. Alcock. Report on Mining Operations in the Province of Quebec during the year 1927.

Origin of Copper Mountain Ores, by V. Dolmage. Canadian Institute of Mining and Metallurgy, Winnipeg, March, 1929.

Geology and Copper-zinc Deposits of Cold Lake Area, Manitoba, by J. F. Wright. Canadian Institute of Mining and Metallurgy, Winnipeg, March, 1929.

Recent Mining Developments in Northern Manitoba, by J. F. Wright. Ottawa Branch, Canadian Institute of Mining and Metallurgy, December, 1928.

The Chibougamau District, Quebec, and the Eagle River Area, Abitibi Territory, Quebec, by J. B. Mawdsley. Report on Mining Operations in the Province of Quebec during the year 1927.

Recent Geological Investigations in Chibougamau District, Quebec, by J. B. Mawdsley. Canadian Mining and Metallurgical Bulletin, October, 1928.

Electrical Methods of Prospecting, by J. B. Mawdsley. British Columbia Miner, March, 1929. Vancouver Branch, Canadian Institute of Mining and Metallurgy, January, 1929.

Semi-precious Labradorite in Canada, by J. B. Mawdsley. Canadian Field Naturalist, January, 1929.

Developments of Petroleum and Natural Gas in Canada during 1927, by G. S. Hume. Institution of Petroleum Technologists (London), vol. 14, No. 69, August, 1928.

Oil Developments and Prospects in Canada, by G. S. Hume. O'Shaughnessy's South American Oil Reports, vol. III, No. 9, January, 1929.

Abrasives, by V. L. Eardley-Wilmot. Mineral Industry for 1927, vol. 36.

Siliceous Abrasives in Canada, by V. L. Eardley-Wilmot. Engineering, April 27, 1928.

Diatomite in British Columbia, by V. L. Eardley-Wilmot. British Columbia Miner, February, 1929.

Diatomite: Its Properties and Use, by V. L. Eardley-Wilmot. Canadian Mining Journal, February 15, 1929.

Diatoms as an Origin of Oil, by V. L. Eardley-Wilmot. Canadian Mining Journal, January 11, 1929.

The Production and Marketing of Copper, Lead, and Zinc in Canada, by A. H. A. Robinson. Mail and Empire (Toronto), Annual Mining Review, January 3, 1929.

The Place of Non-metallics in the Mining Industry, by L. H. Cole. Canadian Institute of Mining and Metallurgy, Winnipeg, March, 1929.

Discovery of Potash Salts in New Brunswick, by L. H. Cole. Dominion Chemical Convention, London, June, 1928.

The Occurrences, Metallurgy, and Uses of Quicksilver, by V. L. Eardley-Wilmot. Canadian Mining Journal, December 28, 1928.

Fuels and Fuel Testing

The Bearing of High and Low Temperature Carbonization and Synthetic Fuel Processes on Canada's Fuel Problems, by B. F. Haanel. World Fuel Conference, London, September, 1928.

The Use of Solid Fuels in the Pulverized State for the Generation of Steam, by E. S. Malloch. Canadian Institute of Mining and Metallurgy, Vancouver, November, 1928.

Coal Briquetting, by A. J. C. Nettell. British Columbia Miner, November, 1928.

The Coal Situation from a National Viewpoint, by Charles Camsell. Manitoba Chamber of Mines, April 10, 1928.

The Test Rate on Alberta Coal to Ontario, by Charles Camsell. Western Canada Coal Review, April, 1928.

Changes in the Fuel Situation in Canada, by Charles Camsell. Toronto Canadian Club, October 22, 1928.

The Problem of Canadian Fuel Independence, by F. G. Neate. Queen's Quarterly, December, 1928.

The Marketing of Canadian Coal, by F. G. Neate. Western Canada Coal Review, October, 1928.

British Columbia and the Coal Industry, by F. G. Neate. Western Canada Coal Review, October, 1928.

The Test Movement of Maritime Province Coal, by F. G. Neate. Canadian Railway and Marine World, June, 1928.

The Fuel Situation, by M. D. McCloskey. Montreal Gazette, December, 1928.

Markets reached by Canadian Coals, by M. D. McCloskey. Topographical Surveyors Society, Ottawa, February 20, 1929.

Markets for Nova Scotia Coal in Quebec and Ontario, by M. D. McCloskey. Halifax Herald, October, 1928.

Ore Dressing and Metallurgy

Electric Steel for Engineering Purposes, by Thomas W. Hardy. Iron Age, December 20, 1928.

Possibilities for a Home Smelter, by A. J. C. Nettell. British Columbia Miner, November, 1928.

Some Notes on the History of the Metallurgy of Copper, Zinc, and Lead, by A. J. C. Nettell. British Columbia Miner, March, 1929.

Ceramics and Road Materials

Treatment of Certain Clays to Overcome Drying Defects, by Howells Fréchette. Canadian National Clay Products Association, June, 1928.

Correction of an Extreme Case of Cracking in the Drying of Brick, by Howells Fréchette and J. G. Phillips. American Ceramic Society, February, 1929.

A New Method of Treating Clays to Overcome Drying Defects, by J. G. Phillips. Canadian Institute of Mining and Metallurgy, March, 1929.

Methods of using Barium-Carbonate for the Prevention of Scum, by L. P. Collin. Footnotes, December, 1928.

Physiography and Topography

The Age of the Upper Great Gorge of Niagara River, by W. A. Johnston. Transactions Royal Society of Canada, vol. XXII, part 1, sec. IV, March, 1928.

The Rivers of Gaspe, by F. J. Alcock. Bulletin of the Geological Society of America, vol. 39, No. 2, June, 1928.

Landslides in Canada, by D. A. Nichols. Canadian Field Naturalist, December, 1928.

Palæontology

A Comparative Study of Different Types of Thermal Stratification in Lakes and Their Influence on the Formation of Marl, by E. M. Kindle. Journal of Geology, February-March, 1929.

A Crustacean New to the Pleistocene Fauna of Canada, by E. M. Kindle. Canadian Field Naturalist, vol. XLII, No. 9, December, 1928.

Notes on a Devonian Plant and Other Observations made on a Visit to Cross Point, Gaspe, Quebec, by F. J. Alcock. Canadian Field Naturalist, March, 1929.

A New Armoured Dinosaur from the Edmonton Formation of Alberta, by C. M. Sternberg. Transactions of the Royal Society of Canada, third series, vol. XXII, sec. IV, 1928.

Dinosaurs in the National Museum of Canada, by C. M. Sternberg. Civil Service Review, March, 1929.

Mining Newsletter Series

(Distributed from the Office of the High Commissioner for Canada in London)

Mining Developments in Yukon Territory, by W. E. Cockfield.
The Porcupine Gold Area, by A. Buisson.
Developments in the Slocan District, B.C., by C. E. Cairnes.
Discovery of Potash Salts in New Brunswick, by L. H. Cole.
Field Work of the Geological Survey, 1928, by W. Malcolm.
Alberta Oil-field Developments in 1927, by G. S. Hume.
Alberta Bituminous Sands for Paving Purposes, by S. C. Ells.
Mining in Nova Scotia, by W. Malcolm.
Silver Mining in Canada, 1927, by V. L. Eardley-Wilmot.
Mining Activities at Cold Lake, Manitoba, by J. F. Wright.
The Lure of Canada's Mineral Possibilities, by W. Malcolm.
Gypsum Industry in Canada Progresses, by L. H. Cole.
The Search for Oil in Western Canada, by G. S. Hume.
Progress in the Rouyn Area, Western Quebec, by A. Buisson.
The New Fuel Research Laboratories, Department of Mines.
Mining in Nova Scotia, by A. H. A. Robinson.
The Ribstone Area, Alberta, by G. S. Hume.
Tin in Oiseau River Area, Manitoba, by J. F. Wright.
The Copper Situation in Canada, by A. Buisson.
Geology of Reindeer Lake, by C. H. Stockwell.
Lead and Zinc in Canada, by A. Buisson.
Canada's Mineral Industry in the Spotlight, by W. Malcolm.
Mining in British Columbia in 1928, by V. Dolmage.
The Gypsum Industry in Canada in 1928, by L. H. Cole.
Soil Surveys in Canada, by W. A. Johnston.
The Sheep Creek Area, B.C., by J. F. Walker.
The Big Bend District, B.C., by H. C. Gunning.
Metal Mining Activity in New Brunswick, by F. J. Alcock.
Annual Meeting of the Canadian Institute of Mining and Metallurgy, by W. Malcolm.

GEOLOGICAL SURVEY

W. H. Collins, Director

CHANGES IN STAFF

The Geological Division lost the services of W. F. James, who resigned on September 23, 1928, to enter the commercial field as a consulting geologist. Dr. James had been on the permanent staff of the Survey for five years, working mostly in Rouyn area. C. S. Evans was appointed assistant geologist on June 8, 1928. A. C. Tuttle was appointed to the Topographical Division as junior topographical engineer on April 1, 1928.

Mr. E. D. Ingall retired on superannuation on November 13, 1928. Mr. Ingall had been continuously connected with the Geological Survey for over forty-four years, his appointment dating from July 1, 1884. His services, which were varied and distinguished, extend over half the period of existence of the Geological Survey. A mining industry was just developing in eastern Canada when he came from England and for the first fifteen years or more he studied such fields as the silver-bearing area around Port Arthur and Fort William, the Bruce Mines copper deposits and the iron ore deposits of eastern Ontario. In 1886 the Geological Survey undertook systematic collection of mineral statistics. This work, begun by Eugene Coste and Mr. Ingall, soon devolved entirely upon Mr. Ingall and was in his charge until 1907, when it was transferred to the Mines Branch and still later (1920) to the Dominion Bureau of Statistics. On relinquishing this work, Mr. Ingall organized and took charge of the important Borings Division of the Survey, for the accumulation of data from oil wells and other deep borings throughout Canada. He continued in charge of this division until he retired. His separation from the Government service has been a source of deep regret not only to his associates in the Geological Survey but to many in other departments.

As a result of the increased demand for geological reports and maps, and the larger number of field parties sent out by the Survey, there has been an even greater increase of work in the Draughting Division. The division undertook, a few years ago, in the absence of trained map draughtsmen, to train apprentices and this plan has been exceedingly satisfactory.

FIELD WORK

Eight years ago, the Survey sent out forty field parties: by 1928 the parties had increased by fifty-three, of which thirty-seven were engaged upon geological work; fourteen in making maps suitable for all general purposes, though primarily for geological use; and two collecting specimens for the National Museum. A brief account is given of the work of each party in the succeeding sections of this report.

GEOLOGICAL DIVISION

G. A. Young, Chief Geologist, reports:

Yukon

W. E. Cockfield mapped geologically and topographically the drainage basin of Little Salmon river, southern Yukon. The area examined is 100 miles long by 5 to 20 miles wide. An apparently small deposit of silver-lead ore a few miles from the head of Little Salmon lake indicates that the district is

mineralized and that other deposits of the same type may be present. A report upon the district, accompanied by a geological map, appears in Summary Report 1928, Part A.

British Columbia

F. A. Kerr continued topographical and geological mapping of a strip of country along Stikine river below Telegraph Creek. During the past season the work was carried southward to the International Boundary. The area lies on the eastern margin of the Coast Range batholith and contains an assemblage of rock formations favourable for the occurrence of metalliferous deposits. An interim report directing attention to the mineral possibilities of the area is included in Summary Report 1928, Part A.

George Hanson commenced a study of the geology and mineral deposits of Alice Arm and vicinity, near Anyox. The mineral deposits contain silver, lead, zinc, and copper. An account of some of the mining properties is given in Summary Report 1928, Part A.

George Hanson and T. C. Phemister made a detailed study of an area of 140 square miles in the vicinity of Topley on the Canadian National railway about midway between Fort George and Prince Rupert. No previous geological work had been done in the area, but mineral deposits had been found. It was believed that through geological work the favourable metalliferous areas might be outlined. This objective was reached. A report on the area is contained in Summary Report 1928, Part A. A detailed map is in course of preparation.

Victor Dolmage mapped topographically and geologically about 550 square miles of territory lying between Taseko lake and Bridge river, southwestern British Columbia. The main objectives were to evaluate the mineral-bearing possibilities of the district and to solve certain problems relating to the Coast Range batholith with which so much of the mineralization of western British Columbia is connected. Certain areas favourable to the occurrence of minerals were noted. One in particular was recommended to prospectors in the district and, as a result, a promising occurrence of copper ore was found late in the season. An account of the district and a preliminary geological map are published in Summary Report 1928, Part A.

J. R. Marshall, assisted by N. F. G. Davis, concluded a geological and topographical reconnaissance begun last year of the Clearwater Lake map-area. This hitherto unexplored and little prospected area extends from the headwaters of North Thompson river west to Clearwater lake. A memoir and map, setting forth the results of the work in 1927 and 1928, are in course of preparation.

C. E. Cairnes completed the investigation of the many mineral deposits and of the geology of Slocan area, about 390 square miles of territory between latitudes 49° 45′ and 50°, and longitudes 117° and 117° 30′. A full report on the geology and mineral resources of this important mining area is being prepared and will be accompanied by geological maps, plans and sections of mines, etc. Mr. Cairnes also made a geological reconnaissance of an area stretching from Slocan lake to and across Upper Arrow lake. This work was done for the purpose of solving certain problems of both scientific and economic interest and also to estimate the economic possibilities of the district traversed. A report upon this work, accompanied by a geological map, is included in Summary Report 1928, Part A. In the same report there is a joint account, by Mr. Cairnes and H. C. Gunning, of a large but low-grade zinc property (the Big Ledge (consolidated) property) west of Pingston, Upper Arrow lake.

H. S. Bostock completed geological mapping of an area in southern Okanagan and Similkameen districts, enclosed by longitudes 119° 30′ and 120°, and latitudes 49° 15′ and 49° 30′. The area includes White Lake coal basin, Ollala and Independence Mountain mining camps, and, also, a number of smaller

groups of mineral claims. One important phase of the work was done for the purpose of promoting prospecting and guiding it to the more likely sections. Mr. Bostock also completed the detailed investigation of Hedley mining camp.

J. F. Walker spent most of the field season on a detailed examination of mining properties in the eastern half of Salmo map-area. This area lies south of Nelson, between latitudes 49° and 49° 15′, and longitudes 117° and 117° 30′. It includes the Sheep Creek gold camp. Recent developments on zinc properties within the area and the revival of interest in the gold properties created a demand for a detailed study of the mineral resources and general geology. Mr. Walker spent a part of the field season investigating the geology near Crawford bay on the east side of Kootenay lake. As a result of this, and previous work, a geological map of Kootenay Lake district, between longitudes 116° 30′ and 117° and latitudes 49° 30′ and 50° 30′ has been prepared. This map and an accompanying report appear in Summary Report 1928, Part A.

H. C. Gunning made a reconnaissance survey of about 1,000 square miles lying north of the main line of the Canadian Pacific railway and within the big bend of Columbia river. The district covered borders Columbia river from Revelstoke northward and extends east to the watershed. All important mineral deposits were studied. They include placer gold, copper, and lead-zinc deposits, with variable values in gold and silver. Tin has also been discovered recently. The lead-zinc deposits are the most important and at present are receiving most attention. A reconnaissance geological map of the area and a report upon the geology and mineral resources are included in Summary Report 1928, Part A.

Alberta

B. R. MacKay made a detailed investigation of the coal-bearing area on the north branch of Hay river in western Alberta, north of the transcontinental line of the Canadian National railways. One result of the field work was the discovery of a coal-bearing belt on the north slope of Hay River valley, extending westward from Thoreau creek. This discovery increases very materially the known coal resources of the district.

C. S. Evans made a reconnaissance of the foothills area between Bow and Saskatchewan rivers for the purpose of securing fundamental geological information such as is required by those exploring for oil and coal.

Saskatchewan

F. H. McLearn and P. S. Warren collaborated in continuing the revision of the areal mapping, stratigraphy, and structure of southern Saskatchewan. The field being investigated extends from the International Boundary north to latitude 52 degrees, and from longitude 102 degrees to longitude 109 degrees. Mr. McLearn's work, of which a more extended account is given in the report from the Palæontological Division, lay in the south part of the field. An account of some important results obtained is given in Summary Report 1928, Part B. Mr. Warren during the field season explored about 12,000 square miles in the northern part of the field. He investigated several deposits of economic interest such as volcanic dust beds in the vicinity of Swift Current and elsewhere. A main objective of the work has been to secure all pertinent information regarding the possible existence of gas or oil fields.

C. H. Stockwell geologically explored Reindeer lake and vicinity, in the northeastern part of the province. An area of 3,500 square miles, partly lying in Manitoba, was geologically surveyed. The zinc-copper deposits on Paskwachi bay were examined. Numerous, large deposits of iron sulphides of, so

far as known, no commercial value were seen. They are of importance as indicating the areas where mineral deposits of commercial value might occur. A geological map and report setting forth the results of the work are presented in Summary Report 1928, Part B.

Manitoba

J. F. Wright geologically explored an area of about 1,600 square miles in the vicinity of Kississing lake, between longitudes 100° 45′ and 102° and latitudes 55° 25′ and 54° 55′. A number of the copper-zinc deposits, including the Sherritt-Gordon, have been discovered within the district and a main objective of the field work was to study these mineral deposits. The mineral deposits were found to be similar in general features to the well-known Flin Flon and other deposits to the south. They occur in highly altered sedimentary rocks believed to have a very wide distribution in northwestern Manitoba and adjacent parts of Saskatchewan. Consequently, the presence of valuable ore-bodies in these altered sediments is of great importance, for the large areas underlain by such rocks must now be considered worthy of careful study and search for additional deposits. The results obtained from the field work, in the form of a geological map and a report, are included in Summary Report 1928, Part B.

W. A. Johnston continued the investigation of the surface geology, including the soils, of an area in southern Manitoba and southeastern Saskatchewan, between latitudes 49 degrees and 52 degrees, and from longitude 102 degrees east to the Ontario boundary. The results are to be issued in the form of a geological map on a scale of 8 miles to 1 inch. Mapping of a large part of the area has been completed.

S. R. Kirk began a resurvey of the bedrock in southern Manitoba and southeastern Saskatchewan, between latitudes 49 degrees and 52 degrees, and from longitude 102 degrees east to the Ontario boundary, for the purpose of preparing a geological map on a scale of 8 miles to 1 inch. The work in 1928 was largely done in southwestern and western Manitoba. The study of the character and structure of the rocks in this part of Manitoba and adjacent parts of Saskatchewan is important in connexion with the occurrence of various non-metallic minerals of commercial value.

Ontario

T. L. Tanton commenced a geological survey of Shebandowan Lake map-area, western Ontario. The area lies between latitudes 48° 30′ and 48° 45′ and longitudes 90° and 90° 30′, and includes about 400 square miles. Copper, nickel, and platinum sulphides, and other mineral deposits occur within the area. The area is also a critical one for the better understanding of the general geology of the region.

L. J. Weeks completed a geological survey of Michipicoten River map-area bounded by latitudes 47° 45′ and 48°, and longitudes 84° 30′ and 85°. The district is occupied by Precambrian lavas invaded by granite. Several gold-bearing properties are known, but a large part of the district is still unprospected.

W. H. Collins, assisted by Robert Thomson and W. A. Jones, continued systematic geographical and geological mapping of the Sudbury nickel basin and a complex area of Precambrian formations southwest of the nickel basin. A short report on certain phases of the work appears in Summary Report 1928, Part C. Since 1925 the Espanola quadrangle, between latitudes 46° 15′—46° 30′ and longitudes 81° 30′—82° 00′ has been mapped for publication of a map-sheet on a scale of 1 inch to 1 mile, and about half of the adjoining Sudbury West quadrangle, between latitudes 46° 15′—46° 30′ and 81° 00′—81° 30′ has been surveyed. The chief results of economic and scientific interest are: (1) considerable

changes have been made, as compared with existing maps, in the outer boundary of the nickel irruptive, along which boundary the deposits of nickel-copper sulphides occur, and further opportunities are indicated for prospecting, especially with electrical apparatus; (2) several faults have been located that intersect the nickel irruptive and may have some relation to the deposits of lead-zinc sulphides that occur inside the nickel basin; (3) the Sudbury series of sediments has been determined to be of pre-Huronian age and to overlie the Keewatin volcanics without evidence of unconformity or any important time interval. The Espanola map-sheet is in course of preparation for publication. Field work will be continued before the Sudbury West sheet and a report can be prepared.

Mr. Thomson concluded, from 1927, a study of the relations of the basic and acid edges of the nickel irruptive, as a subject for his doctorate thesis at University of Chicago.

Mr. Jones began, for his doctorate thesis at University of Toronto, a study of inclusions of sedimentary material in gabbro near Sudbury and of sedimentary materials in granite near Killarney that appear to afford exceptional evidence concerning the processes involved in the assimilation of solid rock matter by magmas. These studies are to be continued in 1929.

T. T. Quirke commenced a geological survey of an area just east of Parry Sound, bounded by latitudes 40° 15′ and 45° 30′ and longitudes 79° 30′ and 80°. This is one of a series of map-units extending from the Huronian region near Killarney southeastward towards the Grenville region of eastern Ontario which Mr. Quirke has studied and mapped since 1923 in an endeavour to learn the relationship of these two geological subprovinces. The region mapped also contains a variety of useful non-metallic minerals, such as feldspar and quartzite, of possible commercial value because of their nearness to manufacturing centres along the Great Lakes.

H. M. Bannerman commenced systematic geographical and geological mapping of an area in Woman River district, lying between latitudes 47° 45′ and 48°, and longitudes 82° and 82° 30′. The area is of particular interest because of the iron formation occurring within it. Lead-zinc deposits, some of them promising prospects, occur, and other known deposits hold small amounts of gold, silver, molybdenite, chromite, or asbestos. A short report on some features of interest is included in Summary Report 1928, Part C.

M. E. Wilson and G. M. Brownell continued geological mapping and the study of the mineral deposits of Westport map-area in eastern Ontario. The area is bounded by latitudes 44° 30′ and 44° 45′ and longitudes 76° and 76° 30′. The greater part of the mapping has been completed. Iron ore, lead ore, graphite, mica, siliceous sandstone, etc., occur in the district.

H. C. Cooke, in order that he might secure information necessary for the preparation of a report on the gold deposits of Canada, briefly studied the central Ontario, Kirkland Lake, and Porcupine gold fields in Ontario as well as the Nova Scotia gold field. In each field the general geological conditions, so far as they were related to the gold deposits, were studied, and the principal mining properties were investigated.

Quebec

J. B. Mawdsley, with the assistance of H. D. Squires and S. H. Ross, geologically surveyed Desmeloizes map-area. This area of about 500 square miles is traversed by the Canadian National railway and adjoins the Quebec-Ontario boundary. Within this area of Keewatin greenstones invaded by various intrusives, are a number of mineral deposits, one of which is the important Abana zinc-copper deposit. An account of the mineral deposits is contained in Summary Report 1928, Part C.

Professor L. Gilchrist of the Department of Physics, Toronto University, and Mr. Mawdsley carried out investigations of electrical and electro-magnetic methods of prospecting. This work was done on the Abana property with the co-operation of three companies who engage in this class of work. The work has been undertaken in order to afford to the public an impartial account of this new, promising method of prospecting.

T. H. Clark continued mapping the geology and studying the mineral deposits of Sutton map-area, southern Quebec. The district has an area of 400 square miles and is bounded by latitudes 45° and 45° 15′ and longitudes 72° 30′ and 73°. This work, as well as that being carried out in the adjoining Lacolle map-area, is of fundamental importance in any attempt to appreciate the geological conditions pertaining to the mineralized belt in southeastern Quebec.

H. W. McGerrigle, under the direction of Mr. Clark, commenced a geological survey of Lacolle map-area lying between latitudes 45° and 45° 15′ and longitudes 73° and 73° 30′. The objectives of this work are similar to those of the work in Sutton map-area; in addition there are, in Lacolle area, belts of limestone and marble affording materials much in demand.

S. A. Northrop, under the direction of F. J. Alcock, commenced a geographical and geological survey of an area bordering Chaleur bay between Port Daniel and Black cape. This work is part of a plan to map geologically the whole Chaleur Bay region.

New Brunswick

F. J. Alcock commenced the study and geological mapping of an area fronting on Chaleur bay, between Belledune river and Nash creek. Mr. Alcock also examined the following deposits, each of some economic interest: a clay deposit near St. John; a copper deposit on Starr island; a zinc occurrence at Frenchman creek; a gypsum deposit at Apohaqui; a copper prospect near Annidale; a copper prospect near Marrtown; the Lake George antimony deposit; and zinc-lead deposits on Bighole creek. An account of several of these deposits appears in Summary Report 1928, Part C.

Nova Scotia

E. R. Faribault, in view of the recent revival of interest in gold mining in Nova Scotia, re-examined the gold mines and prospects being operated. Special attention was given to deposits in Goldenville, Miller Lake, Beaver Dam, Tangier, Montague, and Oldham gold districts, and the operators were directly advised regarding their particular problems. During part of the season, the geological survey of Digby map-area was almost completed. This area is bounded by latitudes 44° 30′ and 45°, and longitudes 65° 30′ and 66°, and has an area of 460 square miles. The district includes the Clementsvale iron deposits which were worked many years ago. Mr. Faribault also examined a lead-zinc prospect recently reopened in Kemptville gold district.

I. W. Jones completed a geological survey of the west half of Springhill map-area, bounded by latitudes 45° 30′ and 45° 45′, and longitudes 64° 15′ and 64° 30′. Most of the area is underlain by Carboniferous strata and particular attention was paid to the distribution, correlation, and economic possibilities of the coal seams, some of which have been mined for very many years. Mr. Jones during part of the season was engaged in collecting samples of the Phalen seam, Sydney coal field. Thirteen pillars, each representing a complete section of the seam, were extracted and shipped to Ottawa for a complete physical and chemical examination, to be made jointly by the Mines Branch and Geological Survey.

G. W. H. Norman continued the geological mapping of Lake Ainslie map-area bounded by latitudes 46° and 46° 15′ and longitudes 61° and 61° 30′. The district has an area of nearly 400 square miles in the central part of Inverness county and includes the coal-bearing areas of Port Hood, Mabou Mines, and Inverness, and the gypsum quarries at Mabou Harbour. Salt springs may indicate the presence of bedded salt deposits. Barite deposits on the east side of lake Ainslie have furnished a considerable tonnage of barite. The mineral resources and the geological conditions are such as to warrant a thorough study of the district.

TOPOGRAPHICAL DIVISION

W. H. Boyd, Chief Topographical Engineer, reports:

During the year topographical and geographical surveys were carried out in British Columbia, Alberta, Manitoba, Ontario, Quebec, New Brunswick, and Nova Scotia.

British Columbia

A. C. T. Sheppard, assisted by A. C. Tuttle, carried out detailed topographical mapping of the Corbin coal area. An area of about 5 square miles was mapped on a scale of 1 inch to 800 feet with contour interval 25 feet. Mr. Sheppard also visited, for the purpose of inspecting and advising on any matters relating to the field work, the parties working under R. Bartlett and S. M. Steeves.

R. Bartlett mapped topographically an area of about 80 square miles in the vicinity of Alice Arm. This area is part of two 15 by 30 minute quadrangles between latitudes 55° 30′-55° 45′ and longitudes 129°-130°, in which work will be continued next year and map-sheets will be published on a scale of one inch to one mile, partly with contour interval of 100 feet.

S. M. Steeves completed 165 square miles of the topographical mapping of the Salmo quadrangle, latitude 49° 00′ to 49° 15′, longitude 117° 00′ and 117° 30′. This map is for publication at one inch to one mile with contour interval 100 feet. Work will be continued in 1929.

Alberta

S. C. McLean carried out primary triangulation control for map-sheets west of Calgary. Approximately 500 square miles were controlled.

D. A. Nichols mapped topographically about 100 square miles of the west half of the Jumpingpound quadrangle, latitude 51° 00′ to 51° 15′, longitude 114° 30′ to 115° 00′. He also commenced topographical mapping of the Wildcat Hills quadrangle, latitude 51° 15′ to 51° 30′, longitude 114° 30′ to 115° 00′. Both sheets are for publication at one inch to one mile with contour interval 25 feet.

W. H. Miller carried out the detailed topographical mapping, on a scale of 1 inch to 1,000 feet with contour interval 25 feet, of the Thoreau Creek coal area. This work covered approximately 12 square miles. Mr. Miller also commenced topographical mapping of the quadrangle contained between latitudes 53° 30′ to 53° 45′, and longitudes 118° 30′ to 118° 45′. This sheet is for publication at one inch to one mile with contour interval 100 feet. Approximately 40 square miles of this latter area was mapped during the season.

Manitoba

R. C. McDonald carried out the transit and tape and transit and stadia control surveys for the Flin Flon sheet, latitude 54° 45′ to 55° 00′, longitude 101° 30′ to 102° 00′. The details of this map will be filled in from vertical aerial

photography. The map will cover an area of approximately 355 square miles and will be published at a scale of one inch to one mile. Mr. McDonald also carried out the transit and tape and transit and stadia control surveys for a mineralized area of about 50 square miles east of lake Winnipeg, which includes Long lake and Beresford lake. The map is on a scale of 1 inch to 1,000 feet. Details will be filled in from vertical aerial photography.

Ontario

Control for the Parry Sound sheet, latitude 45° 15′ to 45° 30′, longitude 80° 00′ to 80° 30′, was carried out by S. C. McLean, H. N. Spence, and K. G. Chipman, working independently. S. C. McLean ran primary control traverses; K. G. Chipman carried a secondary triangulation along the shore of Georgian bay; and H. N. Spence ran transit and tape or transit and stadia control surveys along roads and shorelines over selected routes. This work is required for one inch to one mile mapping from vertical aerial photography.

A. G. Haultain continued the control surveys in the Copper Cliff quadrangle, latitude 46° 15′ to 46° 30′, longitude 81° 00′ to 81° 30′, and the Chelmsford quadrangle, latitude 46° 30′ to 46° 45′, longitude 81° 00′ to 81° 30′. Details in these areas will be filled in from vertical aerial photography and sheets published on a scale of one inch to one mile.

H. N. Spence carried out the geographical control for the Michipicoten River sheet, latitude 47° 45′ to 48° 00′ north, longitude 84° 30′ to 85° 00′. This work is for a geographical sheet on the scale of one inch to one mile.

Quebec

J. V. Butterworth carried out transit and tape control surveys for the Desmeloizes sheet, latitude 48° 45′ to 49° 00′, longitude 79° 00′ to the Quebec-Ontario boundary. A geographical control survey was also made of the portion of lake Abitibi east of the Interprovincial Boundary.

New Brunswick

J. W. Spence mapped topographically the Hillsborough quadrangle, latitude 45° 45′ to 46° 00′, longitude 64° 30′ to 65° 00′. The map of this area, which embraces more than 400 square miles, will be published on a scale of one inch to one mile with a contour interval of 50 feet.

S. C. McLean carried out transit and tape control surveys for the east half of the St. John East sheet, latitude 45° 15′ to 45° 30′, longitude 65° 30′ to 66° 00′. Details of drainage will be put in from vertical aerial photography.

Nova Scotia

J. A. Macdonald carried out transit and tape control surveys in the Port Mouton quadrangle, latitude 43° 45′ to 44° 00′, longitude 64° 30′ to 65° 00′, and part of the Liverpool sheet, latitude 44° 00′ to 44° 15′, longitude 64° 30′ to 65° 00′. In Cape Breton he completed the transit and tape and plane table surveys for the Lake Ainslie sheet, latitude 46° 00′ to 46° 15′, longitude 61° 00′ to 61° 30′. In these areas details will be filled in from vertical aerial photography.

K. G. Chipman visited, for the purpose of inspecting and advising on any matters relating to the field work, the parties working under J. W. Spence and J. A. Macdonald.

The following maps were completed during the year:

Province	Map-sheet	Latitude and longitude	Scale
British Columbia	Corbin detail		1 inch to 1,000 feet
Alberta	Turner valley	50° 30′– 50° 45′ 114° 00′–114° 30′	1 inch to ½ mile
Alberta	Thoreau Creek detail		1 inch to 1,000 feet

The nucleus of a geographical section for the National Museum is being assembled by Mr. D. A. Nichols, incidentally to his duties of Topographical Engineer, with the assistance of the relief map-maker. So far, the exhibit consists only of relief map models to illustrate topographical and geological features, and photographs; but it is proposed as time and facilities permit, to include exhibits representing relations of Canadian geography to transportation, industries, habitation, etc.

MINERALOGICAL DIVISION

Eugene Poitevin, Chief of the Division, reports:

The staff of the division was taxed to capacity during the past fiscal year, due largely to the steadily increasing interest shown by the public in the mining industry of Canada. A great number of mineral specimens received were examined and the demand for mineral collections for educational purposes was large.

Many years ago it was the duty of this division to collect minerals from the principal mining camps throughout Canada for the purpose of preparing special economic collections which were displayed in Canada or abroad. Since 1920 this work has been carried on by the Exhibition Branch of the Department of Trade and Commerce, but this year the Division of Mineralogy was again called upon to make exhibits in Toronto, Minneapolis, and Regina, and it seems likely that more will be prepared in the near future.

FIELD WORK

Eugene Poitevin visited the Cobalt mines for a few days to collect specimens for the Museum and spent the remainder of the time (three weeks) in the serpentine belt of the Eastern Townships of Quebec gathering additional information about the mineralogy of this important area.

H. V. Ellsworth spent two weeks studying rare mineral occurrences in the central Ontario area, one week examining the granites of the Brockville-Mallorytown area, and a few days in company with Eugene Poitevin in the Arundel area, Quebec.

A. T. McKinnon spent two months in Ontario and Quebec collecting minerals required for the preparation of educational collections and also collecting valuable mineral specimens for the Museum from various localities.

LABORATORY WORK

The amount of work performed in the laboratory was unusually large. More than 2,500 rocks and mineral specimens and other samples of various natures were examined and reported on in detail. These specimens came from geologists, mining engineers, prospectors, educational institutions, and others

interested in the mining industry, and were from all parts of Canada. In addition, about 1,500 verbal reports were given to persons who called at the office.

Eugene Poitevin has been working on the optical properties of numerous minerals from the Silver Leaf mine, Manitoba, some minerals from the Quebec serpentine belt, and one new mineral from British Columbia.

H. V. Ellsworth has completed the writing of an economic geology series report on the occurrences of rare earth minerals of Canada. He did a large amount of chemical work on minerals dealt with in this report.

R. J. C. Fabry, analyst, has performed a number of complicated analyses of the topaz, beryl, and margarodite type from the Silver Leaf mine. He has also undertaken the study of perovskite and ilmenite from the serpentines of lake Nicolet in the Eastern Townships of Quebec. He has made analyses of natrolite and prehnite from the granite dykes occurring in the peridotite of Thetford mines. He completed the analyses of a sillimanite gneiss and a charnockite from Kandy, Ceylon, for Dr. F. D. Adams, and also the analyses of a limestone from Ainslie lake, N.S., and three rocks submitted by Dr. T. T. Quirke from Parry Sound district, Ontario. Mr. Fabry also did some research work for Mr. Taverner, ornithologist of the Museum, to determine whether certain colorations found in bird feathers were due to secretions from the bird or due to external environment.

MUSEUM WORK

Owing to the amount of field and laboratory work, the museum work has not been so extensive as it would otherwise have been. Some twenty cases in the National Museum were filled and plans for further exhibits proposed. More than 3,000 mineral specimens were added to the systematic and the economic collections.

EDUCATIONAL COLLECTIONS

The division was equally as busy in preparing educational collections. The extent of the work carried on is shown by the following table, which shows that 379 collections were shipped to various institutions. Of these, each Standard collection contains 144 specimens, Grade 2 contains 44 specimens, Grade 3 contains 40 specimens, Grade 4, a special collection prepared for the Department of Mines, Quebec, contains 40 specimens, Prospectors' collection contains 16 specimens, miscellaneous or special collections vary from a few to more than 100 specimens. Mineral chips collection contains 46 bags of minerals—thus making 11,835 specimens, representing 27,400 pounds of mineral specimens, distributed.

Province	Grade 1	Grade 2	Grade 3	Grade 4	Prospectors'	Miscellaneous	Mineral chips	Kegs
British Columbia	3	1	1	0	5	0	0	0
Alberta	0	1	0	0	0	2	1	0
Saskatchewan	1	0	1	0	3	0	0	0
Manitoba	2	1	1	0	66	1	1	1
Ontario	4	6	48	0	58	22	2	0
Quebec	7	1	0	75	27	13	0	0
New Brunswick	0	0	0	0	4	1	1	0
Nova Scotia	1	0	0	0	0	2	0	0
Foreign	1	0	1	0	3	9	0	1
	19	10	52	75	166	50	5	2

PALÆONTOLOGICAL DIVISION

E. M. Kindle, Chief of the Division, reports:

FIELD WORK

W. A. Bell was engaged in the field from June to August inclusive, partly in correlating formations in Lake Ainslie district, which were being mapped by Mr. G. W. H. Norman, and partly in correlating drill cores cut by coal operators in Pictou coal field. During October he examined stratigraphic relations of the salt bed that had been located by drilling at Gautreau, near Moncton, New Brunswick.

E. M. Kindle was occupied with correlation problems and directing geological mapping in Gaspe peninsula. Field work was carried on from July to September in the coastal belt along the north side of Chaleur bay. Mapping of this belt between Port Daniel bay and Malbaie by Cecil Kindle was begun in June under the supervision of F. J. Alcock and continued under the direction of E. M. Kindle until the end of the season.

F. H. McLearn spent the season in studying the stratigraphy and structure of a part of southern Saskatchewan, a continuation of the work begun in the summer of 1927 (*See also* under Geological Division, page 9).

C. M. Sternberg spent the first two weeks of the field season examining the strata, which were being studied by F. H. McLearn, in southern Saskatchewan, for vertebrate fossils. The rest of the field season was devoted to the Belly River formation near Steveville, Alberta, where he collected dinosaurian and other vertebrate remains.

Miss A. E. Wilson spent about two months in field work in the Cornwall quadrangle, Ontario, making a geological map of the outcrops. A section across the area mapped includes sediments from the Aylmer limestone of the Chazy formation to the Cobourg beds at the top of the Trenton.

OFFICE WORK

Office work by W. A. Bell comprised, in addition to work toward publication of map and reports on Pictou coal field, study of and reports on collections of fossil plants from the following districts: Brûlé coal field, Alberta, White Lake district, B.C., Taseko river, B.C., Pincher creek, Alberta, southern Saskatchewan, and Joggins-Springhill.

E. M. Kindle has prepared several reports on collections of fossils for members of the Geological Survey, for oil companies, and others. A manuscript on one of the formations studied in Gaspe peninsula has been written and a short paper on a Pleistocene Crustacean new to North America has been published.

F. H. McLearn has devoted most of the office season to the examination of collections submitted by field officers for determination, and to preparation of map, sections, etc., and to a summary report on part of southern Saskatchewan studied in the field season of 1928. In addition, papers on the stratigraphy and Cretaceous invertebrates of Blairmore map-area were given a final revision and were assembled with other palæontological and palæobotanical papers for a museum bulletin on the stratigraphy and palæontology of Blairmore area. In time available the study of the ammonoids of the Upper Triassic Schooler Creek formation and the Jurassic ammonoids of the Maude and Yukon formations was continued.

C. M. Sternberg studied vertebrate fossils collected by members of the staff and continued preparation of vertebrate collections.

Miss M. A. Fritz, of the Department of Geology, University of Toronto, was again engaged for three months during the summer in working over old collections of fossils that have been in storage and preparing this material for addition to the reference collection.

ACCESSIONS

Collections of fossils have been received from members of the staff as follows: W. G. H. Norman, F. H. McLearn, I. W. Jones, E. R. Faribault, G. S. Hume, F. J. Alcock, B. R. MacKay, H. S. Bostock, E. M. Kindle, A. E. Wilson, M. E. Wilson.

BORINGS DIVISION

D.C. Maddox, Acting Chief of the Division, reports:

During the year the work of collecting samples and records from wells drilled for oil, gas, and water from all parts of the Dominion was continued, as was also the examination of samples and the recording of the results of such examination, storage of samples, and filing of records. Co-operation with the drillers of water wells was established in many cases and much valuable information regarding the formations passed through and occurrences of water in the wells drilled was thereby obtained. It is hoped that this co-operation will be extended in the future by the establishment of improved methods for aiding the driller in his work.

Assistance has been received from the following:

The Department of the Interior, through Mr. C. C. Ross, Supervisory Mining Engineer, who has charge of the collection of samples and records from wells drilled for oil and gas on Dominion lands in the Prairie Provinces and the railway belt of British Columbia and provides samples and information about wells drilled. In return, the Borings Division supplies the results of sample examination and the results of the palæontological examination of fossils found in samples taken from oil and gas wells.

The Ontario Department of Mines, which, through the courtesy of Col. R. B. Harkness, provided the division with the logs of all wells drilled during the previous two years, together with information as to water occurrences in those wells.

Other government organizations, among them the Department of Agriculture, the Forestry Branch, and the Water Power and Reclamation Service, assisted the division by providing lists of drillers or by notifying the division that wells were being sunk. Geological information in certain areas, with special reference to water conditions, was supplied to several of these departments on request.

The departments of Public Health of several of the provinces provided the division with information as to the chemical nature of the municipal water supply of the principal cities and towns in the provinces. The waterworks engineers of some of the larger cities also co-operated in this work. The Canadian National and Canadian Pacific railways supplied a good deal of information as to wells drilled at stations on branch lines in the western provinces, most of this information coming through Messrs. Duff, Flint, and Company, of Regina, drilling contractors, to whom thanks are due for the collection of these data. Detailed information as to samples and records received will be found in the Summary Reports for the year, these being divided territorially under:

Part A, British Columbia and Yukon;
Part B, Prairie Provinces;
Part C, Ontario, Quebec, and the Maritime Provinces.

A brief review of some of the principal features in the provinces follows.

British Columbia. Drilling for oil and gas was largely confined to the Sage Creek district in Flathead valley. Two wells were drilled during the year from one of which, the B.C. Oil and Gas Company's well, 58 samples were received, examined, and bottled.

Prairie Provinces. The amount of drilling for oil and gas in these provinces greatly increased during the year. In Turner valley the development was remarkable, this field providing a large proportion of the oil and gas produced from the western provinces. Sixty-three and a half per cent of all samples received during the year came from this field, the total received, 11,122, representing about 21 miles of drilling.

The success which attended the search for oil and gas in Turner valley has greatly stimulated interest in other western Canadian fields. Several private companies have done much geological work and structures are being tested in all parts of the west from township 89 to the International border. The Wainwright, Ribstone, Milk River, and Pincher Creek fields send in large numbers of samples, but many others also contribute. Five thousand four hundred and thirty-six samples, representing about 10·3 miles of drilling, were received from western oil and gas wells other than Turner valley. The division was of assistance to some operators in forwarding samples taken from wells drilled some time back in areas in which renewed interest is now being taken. One thousand seven hundred and forty-four samples were sent out.

Ontario. Drilling for oil and gas is under the control of Col. R. B. Harkness, the Gas Commissioner. Records covering 249 wells were received. An attempt to obtain the co-operation of drillers in the matter of drilling for water resulted in the receipt of 125 records and 328 samples.

The only well drilled for oil and gas from which samples were examined was one put down near Collingwood. As a result of this examination a bed of bentonite was located in the Ordovician Trenton limestone at this point.

New Brunswick. Drilling for oil and gas was confined to the operation of the New Brunswick Gas and Oilfields Limited in Stony Creek area near Moncton. Dr. J. A. L. Henderson continued to co-operate with the division by forwarding logs of wells drilled. Samples from well No. 85 of this company in Gautreau district were received and examined.

Nova Scotia. Drilling for oil and gas seems to have been confined to tests for structure. The logs of six test holes of this nature put down in Minudie district by the Imperial Oil Company were forwarded through the courtesy of Mr. John Ness.

No further tests for oil and gas were made in Prince Edward Island since the abandonment of the two deep holes made by the Doherty interests in this province. All records received were from wells drilled for water.

The list of samples and records follows:

—	Records	Samples
British Columbia	4	62
Prairie Provinces, oil and gas	101	16,558
" " water	58	148
Ontario, oil and gas	249	43
" water	125	328
Quebec	5	94
New Brunswick	20	230
Nova Scotia	13	114
Prince Edward Island	9	12
Total	584	17,587

In addition to the routine work done on well samples, considerable attention was devoted to the study of the heavy mineral content of some of the material and about 300 permanent slides of these minerals were made. Mr. F. J. Fraser continued from 1927 the mechanical analysis and the isolation and identification of the heavy minerals in sediments collected in southern Saskatchewan by F. H. McLearn. About 400 slides were prepared and drawings made of 42 of the grains which were photographed and distributed to other workers in this field of research. Interchange of information was made with several British workers, including Dr. W. F. Fleet, Prof. P. G. H. Boswell, of Liverpool University, and Dr. Frank Raw, of Birmingham University; and with several Canadian workers, among these Prof. R. C. Wallace and Messrs. I. G. Spratt, and G. C. McCartney.

Field work was done by R. T. D. Wickenden in connexion with the study of foraminifera from the western Cretaceous sediments. This involved the collection of surface samples at points ranging from Blairmore to the Manitoba escarpment and several wells were visited. The work was in continuation of that done in 1927 and in which Dr. J. A. Cushman is co-operating. D. C. Maddox made a short trip to L'Assomption district in connexion with possible deep water supplies in that area.

DRAUGHTING AND REPRODUCING DIVISION

C.-Omer Senécal, Geographer, and A. Dickison, Chief, Draughting and Reproducing Division, jointly report:

Maps Published April 1, 1928, to March 31, 1929

Series A	Publication number	Title	Remarks
		NORTHWEST TERRITORIES	
219A	2170	Head of Cumberland sound and route to Nettilling lake, Baffin island; scale 1 inch to 8 miles	Geology. For report by L. J. Weeks, Summary Report, part C, 1927
		YUKON	
205A	2152	Dezadeash Lake area; scale 1 inch to 4 miles	Geology. For report by W. E. Cockfield, Summary Report, part A, 1927
227A	2185	Little Salmon area; scale 1 inch to 4 miles	Geology. For report by W. E. Cockfield, Summary Report, part A, 1928
		BRITISH COLUMBIA	
193A	2130	Stewart sheet (west half), Cassiar district; scale, 1 inch to 1 mile	Topography
196A	2138	Vancouver sheet; scale, 1 inch to 8 miles	Geology
200A	2144	Slocan sheet, Kootenay district; scale, 1 inch to 1 mile	Topography
207A	2156	Finlay River area, Cassiar district; scale 1 inch to 8 miles	Geology. For report by V. Dolmage, Summary Report, part A, 1927
		ALBERTA	
201A	2145	Mountain Park sheet (west of fifth meridian); scale, 1 inch to 1 mile	Topography
202A	2146	Cadomin sheet (west of fifth meridian); scale, 1 inch to 1 mile	Topography
204A	2150	Calgary sheet; scale, 1 inch to 8 miles	Geology
—	2151	Sections supplementing Map 204A, Calgary sheet	Geology

Maps Published April 1, 1928, to March 31, 1929—*Continued*

Series A	Publication number	Title	Remarks
		SASKATCHEWAN	
212A	2161	Cypress Hills area, scale 1 inch to 1 mile	Geology. For report by F. H. McLearn, Summary Report, part B, 1927
		MANITOBA AND SASKATCHEWAN	
—	1726	Athapapuskow Lake region; scale, 1 inch to 3 miles	Geology. Reprint
		MANITOBA	
—	1801	Reed and Wekusko Lakes region; scale, 1 inch to 2 miles	Geology. Reprint
195A	2137	Beresford and Rice Lakes area (east of Principal meridian); scale, 1 inch to 1 mile	Geology. For memoir by J. F. Wright
211A	2160	Island Lake area; scale, 1 inch to 2 miles	Geology. For report by J. F. Wright, Summary Report, part B, 1927
		ONTARIO	
198A	2141	Fort William and Port Arthur sheet, Thunder Bay district; scale, 1 inch to 1 mile	Geology (bedrock geology). For Memoir by T. L. Tanton
203A	2149	Thunder Cape sheet, Thunder Bay district; scale, 1 inch to 1 mile	Geology. For memoir by T. L. Tanton
213A	2164	Kakabeka sheet (provisional), Thunder Bay district; scale, 1 inch to 1 mile	Geology. For memoir by T. L. Tanton
214A	2165	Loon sheet (provisional), Thunder Bay district; scale, 1 inch to 1 mile	Geology. For memoir by T. L. Tanton
230A	2189	Ridout sheet (provisional), Sudbury district; scale, 1 inch to 1 mile	Geology. For memoir by R. C. Emmons and E. Thomson
231A	2190	Woman River sheet (provisional), Sudbury district; scale, 1 inch to 1 mile	Geology. For memoir by R. C. Emmons and E. Thomson
		QUEBEC	
206A	2155	Piedmont sheet, Abitibi county; scale, 1 inch to 1 mile	Geology
210A	2129	Part of Lemieux township, Gaspe county; scale, 1 inch to ½ mile	Geology. For report by F. J. Alcock, Summary Report, part C, 1927
222A	2175	Lake David area, Abitibi territory; scale, 1 inch to 1 mile	Geology. For report by J. B. Mawdsley, Summary Report, part C, 1927
		NOVA SCOTIA	
223A	2177	North Mountain area, Inverness county; scale, 1 inch to 1 mile	Geology. For report by T. D. Guernsey, Summary Report, part C, 1927

Maps in Hands of King's Printer, March 31, 1929

Series A	Publication number	Title	Remarks
		BRITISH COLUMBIA	
199A	2143	Britannia Beach sheet, New Westminster district; scale, 1 inch to 1 mile	Geology. For memoir by H. T. James
—	2180	Ore deposits of the Britannia shear zone, New Westminster district; scale, 1 inch to 200 feet	Geology. For memoir by H. T. James
215A	2166	Stewart sheet (west half), Cassiar district; scale, 1 inch to 1 mile	Geology. For memoir by G. Hanson
216A	2167	Bear River sheet (west half), Cassiar district; scale, 1 inch to 1 mile	Geology. For memoir by G. Hanson
217A	2168	Bear River sheet (west half), Cassiar district; scale, 1 inch to 1 mile	Topography
232A	2192	Portion of Slocan and Upper Arrow Lakes area, Kootenay district; scale, 1 inch to 2 miles	Geology. For report by C. E. Cairnes, Summary Report, part A, 1928
		ALBERTA	
208A	2157	Mountain Park sheet (west of fifth meridian); scale, 1 inch to 1 mile	Geology. For memoir by B. R. MacKay
209A	2158	Cadomin sheet (west of fifth meridian); scale, 1 inch to 1 mile	Geology. For memoir by B. R. MacKay
225A	2183	Brûlé Mines area; scale, 1 inch to 1,000 feet	Geology. For report by B. R. MacKay, Summary Report, part B, 1928
		ONTARIO	
155A	1553	Lake Huron sheet; scale, 1 inch to 8 miles	Geology. Second edition
197A	1939	Fort William and Port Arthur sheet, Thunder Bay district; scale, 1 inch to 1 mile	Geology (surface deposits). For memoir by T. L. Tanton
		NOVA SCOTIA	
—	2153	Mahone Bay sheet, No. 88, Lunenburg county; scale, 1 inch to 1 mile	Geology
—	2154	Bridgewater sheet, No. 89, Lunenburg county; scale, 1 inch to 1 mile	Geology

Other Map-Work in Varying Stages of Progress

—	Title	Remarks
	YUKON AND BRITISH COLUMBIA	
1	Atlin sheet; scale, 1 inch to 8 miles	Geology
	BRITISH COLUMBIA	
1	Kootenay Lake area, Kootenay district; scale, 1 inch to 4 miles	Geology. For report by J. F. Walker, Summary Report, part A, 1928
2	Big Bend area, Columbia river; scale, 1 inch to 4 miles	Geology. For report by H. C. Gunning, Summary Report, part A, 1928
3	Lardeau area, Kootenay district; scale, 1 inch to 4 miles	Geology. For memoir by M. F. Bancroft, J. F. Walker, and H. C. Gunning
4	Topley sheet, Coast district; scale, 1 inch to 1 mile	Geology
5	Copper Mountain mining area, Similkameen district; scale, 1 inch to 1,000 feet	Geology. For memoir by V. Dolmage

Other Map-Work in Varying Stages of Progress—*Continued*

—	Title	Remarks
	ALBERTA	
1	Lovett sheet (west of fifth meridian); scale, 1 inch to 1 mile	Topography
2	Cardinal River sheet (west of fifth meridian); scale, 1 inch to 1 mile	Topography
3	Turner Valley sheet (west of fifth meridian); scale, 1 inch to 1 mile	Topography
4	Cadomin-Luscar coal basin; scale, 1 inch to 2,000 feet	Geology. For memoir by B. R. MacKay
	SASKATCHEWAN AND MANITOBA	
1	Reindeer Lake area; scale, 1 inch to 6 miles	Geology. For report by C. H. Stockwell, Summary Report, part B, 1928
	MANITOBA	
1	Kississing Lake area; scale, 1 inch to 2 miles	Geology. For report by J. F. Wright, Summary Report, part B, 1928
2	Winnipeg sheet; scale, 1 inch to 8 miles	Geology (surface deposits)
	ONTARIO	
1	Panache sheet, Sudbury and Manitoulin districts; scale, 1 inch to 1 mile	Geology. For memoir by T. T. Quirke and W. H. Collins
2	Collins Inlet sheet, Manitoulin and Sudbury districts; scale, 1 inch to 1 mile	Geology. For memoir by T. T. Quirke and W. H. Collins
3	Delamere sheet, Sudbury and Parry Sound districts; scale, 1 inch to 1 mile	Geology. For memoir by T. T. Quirke
4	Key Harbour sheet, Parry Sound and Sudbury districts; scale, 1 inch to 1 mile	Geology. For memoir by T. T. Quirke
5	Shebandowan sheet, Thunder Bay district; scale, 1 inch to 1 mile	Geology
	QUEBEC	
1	Dubuisson sheet, Abitibi county; scale, 1 inch to 1 mile	Geology
2	Opazatika sheet, Témiscamingue county; scale, 1 inch to 1 mile	Geology
3	Carleton sheet, Bonaventure county; scale, 1 inch to 1 mile	Topography
	NEW BRUNSWICK	
1	New Brunswick sheet; scale, 1 inch to 8 miles	Geology
	NOVA SCOTIA	
1	Digby sheet, Digby and Annapolis counties; scale, 1 inch to 1 mile	Topography
2	New Ross sheet, No. 86, Lunenburg and Hants counties; scale, 1 inch to 1 mile	Geology

In addition to the foregoing, fifty-seven map and related figure drawings were prepared for reproduction by zinc-cut process, for the illustrating of reports, memoirs, and bulletins; other draughting and associated work necessary for staff and public use amounted to one hundred items.

The duties of the Geographer in connexion with the Geographic Board of Canada have, as usual, been attended to. A Museum Bulletin entitled "Transverse Polyconic Projection for General Maps of Canada," by C. O. Senécal, has been published.

PHOTOGRAPHIC DIVISION

George G. Clarke, Chief of the Division, reports the following work accomplished during the year. A steadily increasing share of this output during recent years has been for other branches of the Department and for the public, to whom photographs for lectures, published articles, and other purposes are supplied at cost.

	Inches		Inches	Number
Contact prints	4 x 5	to	36 x 48	13,302
Bromide enlargements	4 x 5	to	40 x 72	953
Exposures developed	3¼ x 4¼	to	6½ x 8½	5,361
Dry plate negatives	4 x 5	to	11 x 14	465
Wet plate negatives	8 x 10	to	24 x 30	179
Zinc plates	11 x 14	to	24 x 36	20
Photostat copies	7 x 11	to	11 x 14	255
Lantern slides			3¼ x 4	643
Photos and maps mounted				6,404
Total				27,582

The collection of negatives has now grown to more than seventy thousand and comprises photographs of a great variety of subjects from all parts of Canada that have been taken by officers of the Survey during the past sixty or seventy years. It has grown to be of much scientific and even of historical value. However, as no systematic method of selection was instituted at the beginning, the collection includes a rather large proportion of duplicates, and negatives of little subjective value or imperfect photographic quality. These defects are now being corrected. Under the supervision of Mr. W. A. Johnston, the entire collection is being inspected and all negatives of little or no value discarded. It is expected that a reduction of over one-half will be made. Also, to prevent recurrence of this fault, provision has been made to have only selected negatives added to the collection henceforth.

In order to make the renovated collection more readily available to members of the staff, to other Government departments, and to the public, a collection of prints from these negatives is being assembled in the Library. This collection is complete from the year 1916 and within two years should be complete to that time.

GEOLOGICAL INFORMATION AND DISTRIBUTION DIVISION

Wyatt Malcolm, Chief of the Division, reports:

The work of the division consists in answering inquiries for information regarding the geology and mineral resources of Canada. This information is imparted verbally to those making application in person, and is given in the form of correspondence, memoranda, and published reports and maps. A considerable part of the technical correspondence of the Geological Survey is dealt with.

Articles were prepared during the year for publication in the British press and the Canada Year Book. These articles dealt with such subjects as the importance of the mineral industry of Canada, the status of the industry, and the progress made. Numerous short articles were prepared for the use of the press. In this way the readers of the newspapers and mining and scientific journals were kept informed of the nature of the publications issued from time to time by the Survey.

The publications of the Geological Survey and of the National Museum of Canada are distributed by this division. During the year 40,854 publications, exclusive of the French editions, were distributed. Of these, 6,366 were sent to addresses on the regular mailing lists, and 34,488 were distributed in compliance with written and personal requests for named publications, or requests for general or specific information.

LIBRARY

Mrs. F. E. Forsey, Librarian, reports:

Additions to the Library during the year include:

Books purchased	652
Volumes received as gifts or exchanges	996
Pamphlets	446
Maps	235
Periodicals subscribed for	208
Periodicals received as exchanges	459

Six hundred and seventy books were bound, and over 200 publications were placed in pamphlet or folio binders. The bindings of 91 valuable old volumes were repaired.

Owing to changes in the personnel of the library staff the amount of cataloguing accomplished during the year was somewhat less than usual, 2,987 cards being added to the catalogue. Certain important series were analysed under author and subject, analytical cards for 321 volumes being inserted in the catalogue. Accessions not reported above amount to 428 volumes. One hundred and four pamphlets were catalogued and approximately 300 reprints filed.

The lantern slide collection was increased by slides formerly kept in the Biological Division. The bird slides, especially, are extremely popular, and frequent requests are made for their loan to schools and societies. A large number of slides illustrating Canadian geology, mining, physiography, transportation, etc., have been loaned during the year.

Correspondence and reference work and the compiling of bibliographies has been continued.

The recorded loans were 5,153 books, in addition to those used by the many readers who consult the library in person. Inter-library loans were made to eight Canadian universities, to three in the United States, to nineteen Government departments in Ottawa, and to Government laboratories throughout the Dominion.

The Library has again been fortunate in the acquisition of several rare and valuable works, among which may be mentioned: *Linnaean Society Transactions, Zoology*, series 2, vols. 1-19, 1875-1926; *Botany*, series 2, vols. 1-8, 1875-1915; Zahlbruckner's *Catalogus Lichenum Universalis*, 1825-1828; Linnaeus' *Systema Vegetabilium* editio 9, 1817-1820; Ledebour's *Flora Altaica*, 4 vols., 1829-32; Schioler's *Birds of Denmark*, vols. 1-2, 1925-26; Richtofen's *China*, vols. 3 and 5 with Atlas volume 2 (completing the work). The *Nassauischer Verein für Naturkunde in Wiesbaden* presented to the library volumes 23-45, 1869-1892 of their *Jahrbuch*, providing for us an unbroken series from vol. 21 to date; from the *Geologische Anstalt* of Prussia was received the *Beitrage zur geologischen Erforschung der Deutschen Schutzgebiete*, Nos. 1-15, 17-19, 1913-1923. Among the notable series procured during the year were *Nova Acta*, vols. 9-13 and 16, 1874-1893 of the *Royal Society of Upsala; Hegi's Illustrierte Flora von Mittel Europa*, 11 volumes, the first three being the gift of M. O. Malte, Chief Botanist; and a complete set of the *Journal of Morphology*, presented by the Librarian of Parliament.

BRITISH COLUMBIA OFFICE

Victor Dolmage, Geologist in charge, reports:

Owing to the greatly increased interest in mining in British Columbia, not only by the mining companies but by the general public, the activities of the British Columbia Office have grown considerably. During the year 4,300 visitors registered at the office, 584 inquiries were answered by letter and an unusually large number by telephone; 2,400 reports and 2,650 maps were distributed, and a large number of rock specimens and minerals were examined and reported on. Geological investigations were made of the Bridge River-Seton Lake tunnel site for the British Columbia Electric Railway Company; of the Ruskin dam site for the same company; and of the Capilano and Seymour canyons for the Greater Vancouver Water and Sewerage Board. This work was done in addition to the usual field work. Twenty-six lectures on geological and mining subjects were given during the year.

The staff is composed of V. Dolmage and F. A. Kerr, geologists, and A. J. C. Nettell, Assistant Engineer.

NATIONAL MUSEUM OF CANADA

W. H. Collins, Acting Director

The National Museum of Canada is dependent on the Geological Survey for the preparation of its exhibits of mineralogical, palæontological, and geological specimens, and an outline of this work is given in the report of that branch. The heads of the Anthropological and Biological Divisions describe in their reports, given below, the activities of their respective staffs.

In previous reports strong emphasis has been laid on the need of more commodious quarters for exhibition halls, of laboratories, preparators' workshops, and safe and ample storage. Each year the need becomes more acute and is now most keenly felt.

A great mass of material worthy of display in the National Museum has been accumulated and much of it has to remain in storage. Moreover, the interest of other government departments in museum work has been aroused and active co-operation could be secured if facilities for exhibition were available. The Forestry Branch of the Department of the Interior has nearly completed exhibits of forest products for three cases and the Dominion Entomologist will make use of one case at an early date. These exhibits are illustrative of what might be developed into an extensive series.

A series of lectures, of a semi-popular character, on scientific subjects, is given throughout the winter months in the lecture hall of the Museum. Each lecture is given on Saturday morning to children and on the following Wednesday evening to adults. The total attendance of children at these lectures during the winter of 1928-29 was 7,950 and of adults 1,978. The lecture committee, H. I. Smith, M. E. Wilson, and C. L. Patch, on whom fall the responsibility of procuring lecturers and organizing the course, wish to express their gratitude to the members of the staffs of various government departments who delivered lectures.

For many donations and exchanges and for advice and assistance from specialists in certain fields of scientific investigation the Acting Director wishes to express his appreciation. Thanks are also due for the co-operation and assistance of the Canadian National Parks, Forestry, and Northwest Territories and Yukon Branches of the Department of the Interior, the Entomological Branch of the Department of Agriculture, and the Royal Canadian Mounted Police.

Miss Marie C. Stewart, Herbarium Assistant, retired on superannuation in November, 1928, after twenty-seven years service.

ANTHROPOLOGICAL DIVISION

D. Jenness, Chief of the Division, reports:

FIELD WORK

Five parties were engaged in field work during the summer of 1928. H. I. Smith made systematic collections of archæological and ethnological specimens in southern British Columbia, and took motion pictures of the Kootenay, Salish, and Blackfoot tribes; C. M. Barbeau continued his studies of French-Canadian art and handicrafts in Quebec; W. J. Wintemberg, after examining some prehistoric Indian camping sites on Richelieu river, reconnoitred the north shore

of the gulf of St. Lawrence from the strait of Belle Isle to Tadoussac; Dr. J. C. Boileau Grant, Professor of Anatomy in the University of Manitoba, made an anthropometric investigation of the Cree and Chipewyan Indians on lake Athabaska; and C. B. Osgood, of the University of Chicago, travelled down Mackenzie river to Norman where he has undertaken to make, during the winter of 1928-1929, a complete ethnological study of the Hare Indians.

The field work of H. I. Smith added 323 ethnological and 53 archæological specimens to the Museum's collections, together with more than 4,500 feet of motion-picture film. The Indian tribes are now so civilized that it is very difficult to obtain specimens of their earlier tools, weapons, and household furniture, no examples of which will be available a few years hence. The division is, therefore, making a special effort to enlarge its collections while it is still possible, and attempting at the same time to secure photographic records of the fast vanishing native life. It now has material for motion-picture films of six different tribes, five in British Columbia and one on the plains.

C. M. Barbeau spent the field season in Quebec city and its vicinity studying, photographing, and copying historical records concerning the carvings, paintings, and handicrafts of French Canada. In September he attended, with D. Jenness, the meetings of the International Congress of Americanists in New York, where he read a paper on "The Origin of Floral and other Designs among the North American Indians" that outlined some of the results obtained from previous researches.

W. J. Wintemberg made two notable archæological discoveries during the summer. On the north shore of the strait of Belle Isle he found a camping site of the extinct Beothuk Indians of Newfoundland, thereby proving that they occupied at one time the southeast corner of Labrador peninsula. He discovered also a camping site of the Iroquois Indians near Kegashka, which is several hundred miles east of the known range of Iroquois forays.

Dr. Grant secured measurements and observations of a large number of Indians at lake Athabaska which provided, among other results, valuable conclusions concerning the physiological effects of Indian and white admixture. Blood tests obtained confirmed the theory that the pure blood natives do not possess either of the agglutinogens that are generally present in European and Asiatic peoples, a difference that may prove to have an important bearing on the problem of the origin of our native races in America.

A letter from C. B. Osgood, written just before Christmas and received two months later, stated that he was wintering with a small band of Hare Indians at the outlet of Great Bear lake. Influenza had been very rife among the natives and the fishing was poor, so that they were suffering considerable hardships. His work, nevertheless, was proceeding favourably.

OFFICE WORK

The division published two scientific reports during the past year: "A Comparative Vocabulary of the Western Eskimo Dialects," by D. Jenness; and "The Uren Prehistoric Village Site, Oxford County, Ontario," by W. J. Wintemberg. Two other reports have been submitted for publication: "Totem Poles of the Skeena River," by C. M. Barbeau; and "Anthropometry of the Cree and Ojibwa Indians in Northeastern Manitoba," by Professor J. C. Boileau Grant. A preliminary report on the "Anthropometry and Blood Groupings of the Cree and Chipewyan Indians of Lake Athabaska," covering Professor Grant's field work during the summer, has come to hand. W. J. Wintemberg is completing a report on the "Roebuck Village Site in Southeastern Ontario," D. Jenness is preparing a textbook on the "Aborigines of Canada," and C. M. Barbeau a monograph on the "Songs of the Tsimshian." C. M. Barbeau published, jointly with Dr. Ernest MacMillan, a volume of French-Canadian folk-songs entitled "Twenty-one Folk Songs of French Canada," and D. Jenness had an article on the physiography and archæology of Little Diomede

island, Bering strait, in the Geographical Review for January, 1928. The latter also furnished extensive notes on the Indians of Canada to the Bureau of Ethnology, Washington, and revised for that institution a lengthy article on the Eskimos.

The division supplied material for five outside exhibits during the past year. A series of French-Canadian specimens was loaned for the Canadian Folk-Lore Festival held at Quebec in May; in August a large number of specimens from various parts of Canada were loaned in connexion with the centenary celebration at Pembroke, Ontario; in the autumn the Canadian National railways was supplied with Pacific Coast Indian specimens for two exhibits, one in Chicago and the other in Toronto; and in November a series of old Iroquois specimens was loaned to the Buffalo Academy of Science to fill out a special exhibit being arranged by that institution.

Dr. A. Hrdlicka, Curator of Physical Anthropology in the Smithsonian Institution, Washington, and Mr. Walter B. Cline, of Harvard University, spent several days at the Museum in the course of the summer studying its Eskimo and Salish crania. Professor R. R. Gates, of King's College, London, also visited the Museum to obtain information concerning the Indian tribes of Mackenzie River basin.

MUSEUM WORK

In the west anthropological hall are the exhibits devoted to the Nootka Indians of Vancouver island; these have been rearranged. Many are old and of considerable value, and should prove both attractive and instructive to the visiting public. The east anthropological hall is now equipped with fifteen large exhibition cases that only require diaphragms to make them available for immediate use. One case has already been supplied with a temporary diaphragm in order to display the fine collection of Stoney Indian specimens presented by Mr. Martin Nordegg; and a second case contains an experimental exhibit of basketry arranged on glass shelves.

Accessions to Museum

The anthropological collections of the Museum were augmented during the year as follows:

	Specimens
Ethnological	406
Archæological	380
Osteological	12
Total	798

The majority of these specimens were collected by H. I. Smith and W. J. Wintemberg in the course of field work, but the list includes the Nordegg collection of old Stoney Indian specimens, referred to above.

BIOLOGICAL DIVISION

R. M. Anderson, Chief of the Division, reports:

FIELD WORK

In April, 1928, R. M. Anderson visited the Royal Ontario Museum of Zoology, Toronto; the United States National Museum, Washington; the American Museum of Natural History, New York; and made notes on specimens of Canadian mammals on exhibit as well as of methods of arranging and exhibiting zoological and botanical specimens. While in Washington Mr. Anderson attended the Tenth Annual Meeting of the American Society of Mammalogists, April 10-14, and during the course of the meeting read a paper on

"The Bowhead Whale in the Western Arctic." Mr. Anderson left Ottawa on July 14 to accompany the Canadian Arctic Expedition of 1928. This expedition, under the direction of Mr. George C. Mackenzie, Northwest Territories and Yukon Branch, Department of the Interior, sailed from North Sydney, Nova Scotia, on July 19, and its itinerary included Greenland and the chief islands of the Canadian Arctic region. Considerable information was obtained from members of the Royal Canadian Mounted Police, visited at seven different points, on the occurrence of big game, sea mammals, and bird life in their districts, and several members of the police had made valuable collections for the National Museum. Traders at the posts visited were also able to furnish much valuable information. The present range and number of the barren-ground caribou, Peary caribou, musk-ox, Atlantic walrus, narwhal, white whale, ringed seal, harbour seal, harp seal, and other species were checked and revised. The collections made included 108 birds and 19 mammals.

P. A. Taverner, assisted by C. G. Harrold, commenced ornithological investigations in the latter part of May at Matamek, about 8 miles east of the mouth of Moisie river, on the north shore of the gulf of St. Lawrence. Mr. Taverner and Mr. Harrold were for the greater part of the summer the guests of Mr. Copley Amory, to whom thanks are due for courtesies and assistance in the work. Most of the time was spent in studying land birds: 326 birds and 61 mammals were collected.

M. O. Malte, Chief Botanist, National Herbarium, went to points on the Labrador coast, the coast of Hudson strait and Hudson bay, on board the Hudson's Bay Company's steamship *Nascopie*, for the purpose of making botanical collections and obtaining information concerning the flora in these districts. Approximately 6,000 herbarium specimens of flowering plants and ferns were secured, and acknowledgment is due Rev. H. A. Turner, for assistance in collecting these specimens. New species and varieties were obtained, as well as ample material for the interpretation of difficult and hitherto little understood genera. Among the new plant-geographical records obtained were fifty from Southampton island alone.

H. M. Laing was employed temporarily as assistant zoologist during the field season, and continued the work of collecting mammals and other material along the southern boundaries of British Columbia. He collected 481 mammals and 56 birds, together with material for several habitat groups of birds and small mammals.

H. M. Raup, assisted by Mrs. H. M. Raup, made a botanical survey of the southeastern section of Wood Buffalo park, Alberta, and collected about 6,600 herbarium specimens during the season. He also investigated the habits and range conditions of the buffalo that inhabit the district.

C. G. Harrold was employed temporarily as assistant zoologist during the summer of 1928. For several weeks in the early part of the season he collected cranes in the southern section of Saskatchewan, and later he assisted P. A. Taverner in field work referred to above.

C. L. Patch, D. Blakely, C. E. Johnson, and J. Rochon collected material in Ottawa district during the field season.

OFFICE WORK

A second edition of 10,000 copies of "The Birds of Western Canada," by P. A. Taverner (Museum Bulletin No. 41), was published during the year, the first edition having been exhausted.

A report by J. D. Soper, entitled "A Faunal Investigation of Southern Baffin Island" (Museum Bulletin No. 53, Biological Series No. 15), was also published.

R. M. Anderson prepared a paper on "The Work of Bernhard Hantzsch in Arctic Ornithology", which was published in "The Auk" in October, 1928.

Another paper by Mr. Anderson on "The Fluctuations in the Population of Wild Mammals and the Relationship of this Fluctuation to Conservation" was read at the Dominion Provincial Game Conference in Ottawa on January 26, 1928, and was published in "The Canadian Field Naturalist" in November, 1928. A translation of Hantzsch's "Contribution to the Knowledge of the Avifauna of Northeastern Labrador" ("Beiträge zur Kenntnis der Vogelwelt des nordöstlichen Labrador"), published in the *Journal für Ornithologie*, was completed by Mr. Anderson and Mrs. Anderson and was published serially in "The Canadian Field Naturalist."

M. O. Malte continued work on Arctic and other flora in the National Herbarium. An important paper by Mr. Malte on "Commercial Bent Grasses (Agrostis) in Eastern Canada" was published in the Annual Report of the National Museum of Canada for 1926. This report also contained an annotated article by P. A. Taverner on "Ornithological Investigations near Belvedere, Alberta."

MUSEUM WORK

Some progress has been made in installing biological exhibits in the Museum. Several habitat groups of birds and small mammals have been prepared and some old single specimens have been remounted. It has not been possible to do much new work connected with the exhibit of large specimens owing to the lack of exhibition space.

Arrangements have been made with the Forestry Branch, Department of the Interior, to commence an exhibit of the different varieties of wood found in Canada and also some important forestry products.

The Honorary Curator of Entomology, Mr. Arthur Gibson, Dominion Entomologist, is making arrangements to install some new entomological exhibits.

The Commissioner of Canadian National Parks has kindly continued to send to the Museum many specimens of large game predatory and fur-bearing mammals from the national parks, and the Commissioner of the Royal Canadian Mounted Police has, as in former years, sent in valuable material collected in the far north by various detachments of his force.

Accessions to Museum

Accessions to the zoological collections:

Mammals received and catalogued	748
Birds received and catalogued	686
Amphibians and reptiles received and catalogued	114

Plants received outside of collections made by staff:

Mr. H. Groh, Central Experimental Farm, Ottawa	31
Mr. Norman Criddle, Entom. Branch, Dept. of Agric., Ottawa	2
Dr. M. Porsild, Godhavn, Greenland	69
Dr. Selin Birger, Stockholm, Sweden	125
Bro. Louis-Marie, Oka, Que	100
Prof. Marie-Victorin, Montreal, Que	224
The Hungarian National Museum, Budapest, Hungary	100
United States National Museum, Washington, D.C	94
Gray Herbarium, Cambridge, Mass	15

Grateful acknowledgment is made of the receipt of an interesting collection of plants from Bylot island, made by Inspector C. E. Wilcox, R.C.M.P., and collections of seed from Baffin island, made by Staff Sergeant J. E. F. Wight, R.C.M.P.

Plants distributed:

Division of Botany, Central Experimental Farm, Ottawa	10
Dr. F. S. Blake, Dept. of Agric., Washington, D.C	9
Dr. M. Porsild, Godhavn, Greenland	233
Gray Herbarium, Cambridge, Mass	86

MINES BRANCH

John McLeish, Director

Reference was made in last year's report to the growth of the Mines Branch organization from a staff of 21 persons in 1907 to 98 in 1920, and to 151 in 1928.

The total number of employees at the end of March, 1929, was 170, of whom 32 were temporary, and included 60 administrative officers, engineers and chemists, 12 technical clerks and draughtsmen, 25 clerks and stenographers, 20 laboratory assistants in several grades, and 53 mechanics, labourers, and messengers.

The Director, in addition to his departmental administrative duties, attended the regular meetings of the Dominion Fuel Board, and acted as chairman of several sub-committees of this board, the work of which required a considerable amount of time. He attended, as a member, several meetings of the Advisory Committee on Mining Regulations, and meetings of several Associate Committees of the National Research Council, and was authorized to accept an appointment to the Government Advisory Committee on the Civil Service Superannuation Act.

In May, accompanied by Mr. Haanel, Chief of the Division of Fuels and Fuel Testing, he attended, on invitation, the organization meeting in Halifax of a new Nova Scotia Provincial Advisory Board on Fuel Investigations and laid the basis for co-operative work between the Dominion and Provincial organizations investigating fuels.

During August and September, he accompanied Mr. W. B. Timm, Chief of the Ore Dressing Division, on an inspection of western ore treatment mills and metallurgical plants, and had an opportunity of observing and of learning directly from the mill and smelter operators the high value of the services which our ore-dressing investigational work is rendering the industry. A visit was made to the smelter at Tacoma in the state of Washington, where large quantities of copper ores from British Columbia are being shipped for treatment, and to Kellogg, Idaho, to inspect the new Tainton process zinc plant which was just being placed in operation and which, it is claimed, is producing a grade of zinc so high as to command a premium on the market. Conferences were also had, and contracts renewed, with the mining departments of the several western provinces.

In November, he attended the Second International Conference on Bituminous Coal at Pittsburgh, and, in March, the annual meeting of the Canadian Institute of Mining and Metallurgy at Winnipeg.

Investigations of mineral resources, with particular respect to distribution, mining, technology, uses, and markets were carried on by eleven investigators under the Chief of the Division of Mineral Resources. The subjects upon which special investigations were undertaken included asbestos, feldspar, mica, gypsum, salt, bituminous sands, limestone, moulding sands, gold mining, and silver mining, and a comprehensive survey of domestic fuel consumption in Quebec, Ontario, and Manitoba. Close contact was kept with the mining industry generally, on the basis of which a 45-page review on "The Canadian Mineral Industry in 1928" was prepared and issued in March, 1929.

Probably the most significant progress made during the year in the ore dressing and metallurgical work has been the beginning made in the construction and equipment of a pyro-metallurgical laboratory for investigations on the concentration of iron ores, the production of iron and steel and of steel

alloys, and the heat treatment of steels. It is anticipated that material assistance will be afforded the Canadian iron and steel industry through the work that will be undertaken in this laboratory. The progress being made in the development of Canada's mineral resources is being reflected in the increased demand for test and research work on the treatment of complex ores, and it is a matter of considerable satisfaction to know that the results demonstrated in our laboratories are being taken advantage of in many of the mills now under construction. Many metal ores which could not be considered of commercial value ten or fifteen years ago are today being successfully mined and treated because of the improvements that have been made in old processes and the development of new processes for their treatment as a result of continuous and widespread scientific test and research work.

The new fuel research laboratory building at Ottawa was approaching completion at the end of the year, and considerable progress had been made in the installation of the large-scale coking plant and the powdered fuel boiler plant.

Representatives of the Mines Branch, in co-operation with representatives of the Geological Survey and of the Dominion Coal Company and the Nova Scotia Department of Mines, met at Sydney in June, and arranged for a beginning of a chemical and physical survey of one of the coal seams of Sydney area. Some thirteen lines of investigation are under way in the laboratory studies of Canadian solid, liquid, and gaseous fuels. Officers of the staff are members of both Canadian and United States committees on coal classification standards, and the staff of this division is keeping in close touch with the progress of fuel investigations in the United States and in Europe, especially in respect to the burning of coal in the pulverized form, the carbonization of coal at both high and low temperatures, and the more complete production of oils from coals. Additional research work along these lines is being planned to be undertaken in the new fuel research laboratory.

Eleven major investigations were in progress during the year in ceramics and road materials, all of which have a definite bearing on the development of industry and the utilization of Canadian resources. One of these investigations, viz., "the treatment of certain western clays to overcome drying defects", was productive of such valuable economic results that immediate publicity was given thereto through, first, a mimeographed report, followed by papers contributed to the American Ceramic Society, and the Canadian Institute of Mining and Metallurgy.

Both the clay and road materials work carried on during the year in Prince Edward Island have been of particular interest and value to the provincial authorities in that province.

MINERAL RESOURCES DIVISION

The Chief of the Division of Mineral Resources, A. W. G. Wilson, spent about two and one-half months on field service, one month of this time being devoted to special investigations on behalf of the Advisory Board on Tariff and Taxation. In company with J. G. Ross three weeks were devoted to a study of current progress in the asbestos industry in Quebec and to visits to a number of industrial plants in the United States where asbestos products are fabricated. Three weeks were spent with S. C. Ells in Alberta inspecting drilling operations on the bituminous sands on Athabaska river, below McMurray. On this trip two localities suitable for new quarry sites were selected and arrangements were made for drilling and sampling; officials of the Saskatchewan Government were consulted in connexion with a proposed experimental demonstration of road

surfacing with bituminous sand products. As in the previous year, the services of the Chief of the Division were requisitioned by the Advisory Board on Tariff and Taxation, about one-fifth of his time being given to this work. One month was spent on special field investigations; a number of reports were compiled in the office; and he was in attendance at hearings dealing with mining machinery, coal, steel, copper rods, cement, plate glass, and ethylene glycol, being subject to call for information or evidence upon a number of occasions.

H. S. Spence was engaged during the field season in resurveying the feldspar and mica industries. Not only were field investigations made in Canada, but these studies were extended to include developments in eastern United States and in South Dakota. The results of this work will be embodied in two bulletins now nearing completion. The investigation of Canadian flake graphite, instituted last year, was still in progress; flake graphite was recovered in the ore dressing laboratories of the Mines Branch from ore procured by Mr. Spence in 1927. This product was later dispatched to the Morgan Crucible Company in Great Britain for testing.

L. H. Cole was engaged in securing the necessary field data for the completion of bulletins on the gypsum and on the salt industry of Canada. During the progress of the work large samples of gypsum were procured from the various Canadian occurrences and subjected to large-scale laboratory tests in Ottawa; the results of these tests will appear in the new bulletin. Samples of brines from salt springs or wells in the Maritime Provinces were also procured for laboratory investigation. Recent advances in the technology of gypsum, gypsum products, and salt in both Canada and the United States are being studied preparatory to the completion of these reports.

S. C. Ells continued his work in McMurray area in developing methods of drilling and sampling deposits of bituminous sands; this testing work has now been completed. If any further experimental demonstration work is carried on, a new quarry site from which material can be procured is required; two possible sites for this purpose were selected and sampled by drilling. All samples obtained during the season's drilling operations were forwarded to the laboratories at Ottawa for examination. Tentative designs for a new portable heating and mixing plant for preparing asphaltic mixes for demonstrations in road surfacing were prepared, and the mixing drums and mountings were purchased; no progress was made in the construction of the plant. Mr. Ells spent about four months in Europe, part of the time being on leave, but he also utilized the opportunity to make a comparative study of European rock asphalt deposits and secured extensive information about the commercial methods employed in the preparation of these raw materials for use; a comprehensive report covering this investigation is in course of preparation.

M. F. Goudge continued the systematic survey of the limestone resources of Canada. The fourth season on this work was devoted to studies of the limestone resources of the Prairie Provinces and of British Columbia along some of the principal railway lines; work in this latter province will be completed next season. Late in the season visits were made to localities in western United States, where limestones and magnesites are produced, to study the latest technical developments in the industry.

A. H. A. Robinson is engaged primarily upon the compilation of a report on lode mining for gold ores in Canada. He also has reported on current progress in the mining of ores of base metals in central and eastern Canada. During the field season the principal metal mining camps in the Maritime Provinces, Ontario, Quebec, and Manitoba were visited.

V. L. Eardley-Wilmot is now engaged on the compilation of a monograph on silver. The assembling of material for this report necessitates studies of the history of the mining of silver-bearing ores in Canada, discussions of current

technology in the recovery of silver from these ores, and an investigation of markets, uses, and applications of the metal in the arts and crafts. During the past season visits of inspection were made to Cobalt area, Ontario, and to the silver-lead-zinc mines of British Columbia. During the autumn a short trip was made to certain mines in Quebec where silver is produced as a by-product.

Arthur Buisson, mineral technologist in charge of the records section of this division, spent two months visiting the principal mining centres of northern British Columbia and the Pacific coast. This season's work was in continuation of a practice initiated some years ago to procure for the records first-hand information about current developments and local conditions in the various mining districts of the country. Based on this work a number of short articles for distribution to the press have been prepared by Mr. Buisson.

C. H. Freeman, junior engineer attached to the records section, was employed in studying conditions in the sand and gravel industries in the Maritime Provinces and in Ontario and Quebec. Inquiries were also instituted to ascertain the sources from which Canadian foundries are drawing their moulding sands; large samples of Canadian sands apparently suitable for use in this way were procured for laboratory examination, and this latter investigation is now in progress.

E. H. Wait, junior engineer attached to the records section, was employed in studying current conditions in the areas north of lakes Huron and Superior where prospecting and mining development are in progress. Mr. Wait also made some preliminary inquiries into the present status of the ochre industry in Quebec.

John Casey, statistician attached to this division, conducted the second survey of fuels used for domestic heating. The first survey covered only Ontario and Quebec; this year the work was expanded to include Manitoba. Information was collected respecting the source of supplies and the quantities consumed of the following sources of heat: coals and cokes, charcoals, briquettes, gases, both natural and artificial, fuel oil, electric energy, and such other fuels as are used for domestic purposes. In all, nine hundred and twenty-eight municipalities and the operations of about thirty-two hundred domestic fuel distributors were covered. Much of the survey was conducted by circular letter and correspondence, but it was also necessary to follow up written inquiries by personal visits to distributors; two hundred and forty-five municipalities were visited during eleven weeks' field work.

J. G. Ross, consulting mining engineer, was engaged to prepare a monograph on asbestos and the asbestos industries. During the year he studied operations at the mines in Quebec, and also inspected factory operations at many points in the United States. On part of these examinations he was accompanied by Mr. Wilson, Chief of the Division. Later in the autumn Mr. Ross also visited producing localities in the states of Arizona, New Mexico, and California to study operations there. The results of these investigations are embodied in a report that is now in process of publication.

ORE DRESSING AND METALLURGICAL DIVISION

W. B. Timm, Chief of the Division, reports an increase in the amount of investigative work on ore treatment as the result of greater activity in the mining industry. The assistance being given in connexion with ore treatment problems is becoming more widely known to the operators of mining properties, and, consequently, the ore testing laboratories are taxed to their limit to meet the demands for investigative work. At the close of the year, the work in progress and on hand was sufficient to keep the present staff with the present laboratory

facilities, busily engaged for some time. More laboratory space is urgently required in order to take care of the increasing number of applications and requests for experimental test work resulting from the rapid expansion of the mining industry in Canada.

The permanent staff was increased during the year by the appointment of T. W. Hardy, a specialist on iron and steel metallurgy. He will be in charge of the iron and steel section of the division. A pyrometallurgical laboratory is in course of erection and will be equipped for investigations on Canadian iron ores, and iron and steel products. The other sections of the division are as follows:

The ore dressing section for metallic ores, with C. S. Parsons, engineer in charge.

The ore dressing section for non-metallics, with R. K. Carnochan, engineer in charge.

The hydrometallurgical and electrochemical section, with R. J. Traill, engineer in charge.

The chemical section, with H. C. Mabee, chief chemist, in charge.

The co-operative arrangements entered into with the Base Metal Extraction Company Limited and the Cassel Cyanide Company of Canada, Limited, were still existent. Considerable progress was made in the working out of details of the Base Metal Extraction Company's process for the treatment of bulk concentrates from base metal sulphide ores. The company is looking into the possibility of establishing in eastern Canada, a plant for the treatment of such concentrates from the more complex ores which are difficult to concentrate by selective flotation methods. Progress was made by the Research Fellow maintained by the Cassel Cyanide Company, on the use of cyanide for the selective flotation of the base metals sulphides, especially the copper-zinc-iron sulphide ores.

W. B. Timm spent three months in the field securing information on the progress in ore dressing and metallurgical practice and in renewing personal contact with those engaged in the mining industry. C. S. Parsons spent two months in the field visiting ore concentration and metallurgical works in southwestern United States to obtain information on recent developments in ore dressing and metallurgical practice. T. W. Hardy visited the iron and steel plants in Ontario, securing information regarding their activities and metallurgical practice. A. K. Anderson spent six weeks in Rouyn area, western Quebec, investigating certain problems related to the concentration of the copper-zinc ores of that area. J. S. Godard spent a week in the central Manitoba gold mining district investigating problems related to the milling of the ores.

T. W. Hardy and H. C. Mabee devoted considerable time to the preparation of plans for the new pyrometallurgical laboratories and to the alterations to the old fuel testing laboratories, to provide increased laboratory facilities for the division. On request of the Chairman of the Tarff Board, T. W. Hardy was detailed to act in a consulting and advisory capacity to the board on matters pertaining to the iron and steel industry.

LABORATORY INVESTIGATIONS IN ORE DRESSING AND METALLURGY

C. S. Parsons, A. K. Anderson, and J. S. Godard conducted the investigations on the treatment of metallic ores as follows:

Lead ore from the Ogema mine, Dorion, Ont.
Copper-gold ore from the Horne mine, Noranda, Que.
Copper-zinc ore from the Abana mine, Dupuy, Que.
Gold ore from the Grace mine, Michipicoten, Ont.
Gold ore from the Malartic mine, Amos, Que.
Copper-molybdenum ore from the Golconda mine, Keremeos, B.C.
Copper-zinc ore from the Sherritt Gordon mine, Cold Lake, Man.
Copper-zinc ore from the Amulet mine, Rouyn, Que.

Lead-zinc ore from Larchwood, Ont.
Gold ore from the Second Relief mine, Erie, B.C.
Copper-gold ore from Oxford lake, Man.
Copper-zinc-pyrite ore from the Aldermac mine, Aldermac, Que.
Silver-lead-barite ore from the Homestake mine, Adams Lake, B.C.
Arsenical-gold ore from Cameron island, lake of the Woods, Ont.
Copper ore from the Hollinger-Kamiskotia mine, Kamiskotia, Ont.

R. K. Carnochan and R. A. Rogers conducted the investigations on the concentration and preparation of non-metallics as follows:

Asbestos from Sproat mountain, Arrowhead, B.C.
Limestone from L'Etang, N.B.
Soapstone from Robertsonville, Que.
Calcite from the Frontenac lead vein, Perth Road, Ont.
Oyster shells from Orangedale, C.B.
China clay from St. Remi, Que.
Garnet from Labelle, Que.

The investigation on the concentration of Canadian graphite from typical Canadian occurrences for the manufacture of crucible flake was conducted by C. S. Parsons and R. K. Carnochan. Concentration tests were conducted on two carload shipments from Buckingham and Guenette, Quebec.

R. J. Traill, W. R. McClelland, and J. D. Johnston conducted the following investigations:

The hydrometallurgical treatment of high-grade iron-copper concentrates for the recovery of the copper and precious metal values; of the iron content as electrolytic iron and the sulphur as elemental sulphur.

The roasting and direct reduction of the high sulphur magnetite iron ore of the Bristol mine, Bristol Mines, Quebec.

The metallization of the iron content in ilmenite ore from Ivry, Quebec, by means of rotary kiln type of furnaces.

H. C. Mabee, chief chemist, reports that a total of 1,736 reports of analysis were issued during the year, which involved over 7,000 determinations. During the same period Mr. Mabee conducted an investigation on the manufacture of calcium molybdate from Canadian molybdenite concentrates.

FUELS AND FUEL TESTING DIVISION

B. F. Haanel, Chief of the Division, reports greatly increased activity in both investigational and routine work. The new fuel research laboratory building was completed and a start made on the installation of small and large scale experimental equipment, the most important of which was a semi-commercial by-product coke oven and a pulverized fuel boiler. A good beginning was also made on a comprehensive chemical and physical survey of the Phalen seam in Nova Scotia, the field work of which was conducted in co-operation with the Geological Survey, the Nova Scotia Provincial Government, and the Dominion Coal Company. Peat manufacturing operations were conducted at the Alfred peat bog from May 15 to September 15, 1928.

The technical staff of the division was increased by the appointment of H. McD. Chantler as chemist. J. L. Bowlby, assistant chemist, resigned to accept a position in a commercial coal laboratory. E. Swartzman was appointed as junior chemist.

The investigational and research work of the division, under R. E. Gilmore, superintendent of the fuel testing laboratory, was organized into five sections, under the immediate charge of an engineer or chemist, as follows:

Mechanical engineering	E. S. Malloch
Coal carbonization and briquetting	R. A. Strong
Oil-shale investigations	A. A. Swinnerton
Oils and natural gas	P. V. Rosewarne
Chemical laboratory (solid fuels)	J. H.H. Nicolls

INVESTIGATIONS AND EXAMINATIONS MADE BY THE CHIEF OF THE DIVISION AND TECHNICAL ENGINEERS

In addition to planning and directing the work of the division, Mr. Haanel attended the regular meetings of the Dominion Fuel Board, and devoted considerable time to details in connexion with the completion of the new fuel research laboratories and equipment. A part of his time was spent in supervising the investigation conducted at Alfred, Ontario, for the manufacture of peat fuel. Mr. Haanel went to England in August, where he presented a paper before the World Power Conference, and spent two months visiting the most promising of the coal processing plants in the British Isles and on the Continent. He made several trips to Montreal at the instigation of the Canadian National railways for consultation in connexion with low-temperature carbonization, and also had conferences with the Fuel Purchasing Department of that railway regarding an investigation concerning the weathering of coal stored in large open piles and its liability to spontaneous combustion. He went to Toronto to discuss with Mr. Piron the Piron process for low-temperature carbonization. In November he attended the Second International Conference on Bituminous Coal held at Pittsburgh, and visited the United States Bureau of Mines at Washington. During the year Mr. Haanel attended two meetings of the Nova Scotia Advisory Board of Fuel Investigation at Halifax.

E. S. Malloch and C. E. Baltzer, in addition to their routine duties, jointly conducted and reported on a series of tests on the fire setting propensities of slag dropped from oil-burning locomotives for the Fire Inspection Department, Board of Railway Commissioners; and jointly prepared three papers entitled: "Industrial Fuel and Power Statistics for Ontario, Calendar Year 1925"; "The Use of Gas and By-Product Cokes for Domestic Heating Purposes"; and "Directions for Domestic Use of Peat Fuel". During the year Mr. Baltzer examined and reported on the preliminary operation of the pulverized fuel equipment installed on board the Dominion Coal Company's steamship *Lingan;* witnessed and reported on a series of tests made on the pulverized fuel fired boilers of the Canada Electric Company, Limited, at Maccan; and visited a number of pulverized fuel fired boiler plants in eastern and western Canada.

R. E. Gilmore was largely occupied with the details pertaining to the completion of the new laboratory building, in which work he was assisted by V. A. Minnes. In addition to his regular supervising duties, he assisted in planning the laboratory work of the division. Other work requiring his special attention was: special reports on a quarter-ton sample of brown lignite coal submitted by the Ontario Department of Mines, and on the bituminous coals of the Maritime Provinces in relation to their suitability for various low-temperature carbonization processes. He also attended the Second International Conference on Bituminous Coal held in Pittsburgh, and studied the work of both the Canadian and American Coal Classification Committees.

R. A. Strong, assisted by E. J. Burroughs, completed the underground sampling in connexion with the chemical and physical survey of the Phalen coal seam and made a preliminary survey of the coal preparation and shipping methods practised for Nova Scotia coals. He also assisted the superintendent in respect to the winter storage of run-of-mine railway coal and slack coal from the Maritime Provinces at the stock piles in Montreal. With Mr. Burroughs' assistance, he conducted comparative, high and low temperature carbonization tests on the Phalen seam composite samples, and made a study of the variation in respect to fusibility of ash of certain sectional samples. Mr. Strong represented the division at the annual meetings of the A.I.M.M. and C.I.M.M. at

New York and Winnipeg, respectively, and was a member of the Canadian delegation at the Second International Conference on Bituminous Coal held at Pittsburgh.

A. A. Swinnerton and G. P. Connell paid special attention to laboratory work pertaining to oil-shales and bituminous sands. In addition to reporting on Canadian oil-shale developments, Mr. Swinnerton conducted a month's field work in Pictou area, Nova Scotia, where he sampled the most promising outcrops from which composite and sectional seam samples were obtained for laboratory test and record as to their oil-bearing properties. Mr. Connell conducted the laboratory testing on the samples of bituminous sands submitted by the Mineral Resources Division, particularly as to the standardization of methods of analysis pertaining to the same.

P. V. Rosewarne worked on Canadian crude oil and natural gas resources, in which connexion he visited the producing fields in southern Ontario and Alberta. In addition to completing the collection of representative crude oil samples from both south and west, he studied the basic natural gas situation in the Turner Valley and other Canadian fields, concentrating a large part of his effort on the recovery of helium and other valuable constituents in the gas. Assisted by Messrs. H. McD. Chantler and R. J. Offord, he made progress on the examination of the crude oil survey samples, conducted the sixth annual gasoline survey, and enlarged his manuscript re standard methods of analysis for oil to include gasolines and illuminating oils, as well as lubricating oils. He also represented the division at the spring meeting of the American Chemical Society, at St. Louis, and visited the United States Bureau of Mines Experiment Station at Bartlesville, and several natural gas producing and refining companies in Oklahoma.

J. H. H. Nicolls, besides looking after the indexing and compiling of analytical results on solid fuels, conducted further experiments on the caking index values of Canadian bituminous coals. He assisted in field work in connexion with the Phalen seam sample taking, and with the assistance of Mr. Swartzman, conducted "forms of sulphur" work on the survey coal samples. Mr. Nicolls also devoted some time to the standardization of coal analyses methods and continued his study of the application of different schemes for classifying Canadian coals according to chemical characteristics.

Chemical Laboratory Work

C. B. Mohr was assigned immediate charge of the proximate analyses and calorific value work on solid fuels according to standard laboratory methods, in which work he was assisted by G. P. Connell, and a junior staff.

H. McD. Chantler, assisted by R. J. Offord (and a junior staff) attended to the analytical work pertaining to samples of liquid fuels coming in from other government departments, commercial firms, and private individuals.

During the year a total of 1,376 samples of solid, liquid, and gaseous fuels were examined. Of these 700, that is, approximately 51 per cent of the total, were sent in from other divisions of the Mines Branch, from the Geological Survey, from other government departments, from public institutions, commercial firms, and private individuals. The remaining 49 per cent pertain to investigations conducted by the technical staff of the division. Of the total samples submitted from outside the division, 398 were from other divisions of the Mines Branch, mainly from the Mineral Resources Division, 49 from the Geological Survey, 99 from the Department of Soldiers' Civil Re-establishment 57 from

other government departments, and 97 from public institutions, commercial firms, and private individuals. The following is a classification of the various kinds of fuels analysed:

Solid fuels; total samples examined		559
Coals (various kinds)	447	
Cokes and chars	82	
Peat and miscellaneous	30	
Liquid fuels; total samples examined		326
Gasoline	249	
Lubricating oils	12	
Crude oils	42	
Other petroleums, oils, and miscellaneous	23	
Gases from coals, oil-shales, etc		65
Oil-shales		37
Bituminous sands		389

Work Performed by the Mechanical Staff

A. W. Mantle, mechanical superintendent, reports increased activity in the mechanical section. This was largely due to additional work done in connexion with the removal to and erection of equipment and machinery in the new Fuel Research laboratories. He acted in an advisory capacity in regard to the operation, supervision, and alteration of machinery used in the peat manufacturing operations at Alfred.

PEAT OPERATIONS AT ALFRED, ONTARIO

E. V. Moore, engineer in charge of peat fuel manufacturing operations at Alfred, reports that the peat manufacturing plant was put in operation on May 15, and was operated for a period of 2,132 hours, of which time the plant actually manufactured peat fuel during 1,197½ hours; the balance of the time was lost largely through abnormal weather conditions. The total quantity of fuel laid on the field was 10,000 tons, of which 5,400 were placed in storage or loaded on railway cars. In addition to this quantity, 750 tons were stored in the field. The fuel loaded on railway cars for shipment up to March 31, amounted to 1,211 tons, and fuel loaded for local sales 156 tons. The fuel on storage field, March 31, 1928, amounted to 4,116 tons, and the fuel in storage on drying field, 750 tons. The results of the season's operations demonstrated the commercial applicability of the plant, in that there were no serious breakdowns, and repairs were less than the estimated amount. It was also demonstrated that under normal weather conditions, with equipment as it now stands, an average capacity of 17 tons of saleable peat fuel per hour could be produced, but with a larger motor on the macerator it would appear that the maximum capacity of 20,000 tons could be reached. The plant was closed up for the winter on December 22, but provision was made for loading fuel during the winter months.

CERAMICS AND ROAD MATERIALS DIVISION

Howells Fréchette, Chief of the Division, reports a continued growth in the activities of the division and much progress in the investigations in hand. The permanent technical staff was increased by the appointment of J. G. Phillips, ceramic engineer, on July 14, 1928.

During the year, a small, high-temperature gas-air furnace for the determination of the softening temperature of clays, and a gas-fired furnace for the testing of refractories under load, and other equipment were installed in the laboratories.

CERAMICS

The investigation on the treatment of certain western (Prairie Provinces) clays to overcome drying defects, conducted by Mr. Fréchette and Mr. Phillips, referred to in last year's report, having been brought to a successful conclusion in the laboratory by April 1, 1928, full-scale tests were made at the plant of the Redcliff Brick and Coal Company, Limited, Redcliff, Alberta, in April, May, and June. In these tests the use of chemicals as a means of promoting rapid drying without cracking the bricks was tried under operating conditions. Such gratifying results were obtained in the tests that treatment was adopted for regular operation. This consisted of the addition of ferric chloride and common salt to the clay. Prior to the introduction of the process, drying the brick required from seven to eight days. This time was reduced to three days and the loss due to cracking was reduced from about 40 per cent to almost nothing. The output of the plant, which was controlled by the capacity of the dryers, was, consequently, very greatly increased and the quality of product improved. Notwithstanding the high extra cost for chemicals, the cost of manufacture has been reduced and the product sells for an increased price owing to the improved quality. The results attained at this plant serve to demonstrate what may be accomplished at a number of other plants in the Prairie Provinces where similar clays are used.

The success of chemical treatment as a means of improving the drying behaviour of clays in Alberta prompted a request from the Montreal Terra Cotta Company, Limited, for an investigation of the clay used by them for the manufacture of building tile to determine whether similar treatment would permit faster drying of their ware and reduce the loss through breakage. Since this clay is of a different type from that dealt with in the former investigation and similar to much of that occurring in St. Lawrence valley the problem was considered to be one that would develop new data on chemical treatment and, if successful, would be of general value to the clay workers of the district. A start on this investigation has been made by Mr. Phillips in the laboratory. Early tests indicate that chemical treatment may be looked to as a means of attaining a marked improvement in the drying of the ware.

A limited amount of laboratory work was done by Mr. Phillips on clay from Edrans, Manitoba, to improve, by the use of chemicals, the firing properties of the clay and the colour of the burned brick.

Considerable time was spent by L. P. Collin on the investigation for the production of grey brick. Six manufacturers have shown a very keen interest in this investigation. Samples of clay submitted by four of these have been mixed with varying percentages of limestone dust and manganese. A satisfactory grey has been developed in the laboratory from two of these clays and attempts have been made to duplicate this colour at the plants on a commercial scale, but without success. A new line of experiments must be followed, as no admixtures of limestone dust and manganese can produce with these clays a grey brick economically that will be of as high a quality as the imported brick.

The investigation of ceramic bodies for electrical heating devices is well on the way to completion. Bodies have been developed by Mr. Collin which have a much greater resistance to temperature change than those on the market. The one objectionable characteristic of these is their extremely high shrinkage. It is proposed to conduct further research to find a means of reducing this shrinkage.

The investigation of the clay and shale resources of Prince Edward Island, commenced in 1927, was completed by Mr. Fréchette who, during July and August, studied the various deposits and obtained samples for testing. These

samples are being tested in the ceramics laboratory by J. F. McMahon to determine their various properties and the industrial purposes for which they are suitable.

During the summer Mr. McMahon made a study of the excavation and transportation of clays at fifty brick and tile plants in Ontario and Quebec. Information as to the cost of the various operations was secured and much general data gathered which will serve in determining the most economic methods of operation under specific conditions.

During the year 136 samples of clays and shales were tested. Tests were made on two samples of mineral pigment, one sample of limestone, two samples of sericite, two samples of diatomite, and two samples of soapstone.

A number of refractory shapes were made for use in the ceramic laboratory and for other laboratories of the Department.

The research on the manufacture of high-grade refractory brick from Canadian magnesite continued throughout the year. This investigation is being made in co-operation with the National Research Council of Canada.

ROAD MATERIALS

R. H. Picher, road materials engineer, completed his surveys and sampling of the deposits of conglomerate and gravel in Prince Edward Island. During July, August, and September Mr. Picher examined twenty-five deposits of conglomerate or gravel, of which about seventeen proved to be of value as sources of road material.

One deposit of conglomerate and two of gravel were examined and sampled in New Brunswick at the request of the Provincial Department of Public Works.

The laboratory work consisted in testing the samples collected during the field season, and fifteen samples of rock and gravel submitted by the public, to determine their suitability for road purposes.

CHEMISTRY DIVISION

F. G. Wait, Chief of Division, reports:

From April 1, 1928, to March 31, 1929, fourteen hundred and nine specimens have been reported on.

The work of the different members of the chemical staff has been as follows:

H. A. Leverin continued the investigation commenced in 1927 on the rate of drying of peat under the climatic conditions prevailing at Alfred, Ontario. He made complete or partial analyses of a large number of samples of widely varying materials comprising gypsums, sandstones, limestones, clays, boiler scales, alloys, titaniferous ores, calcined magnesites, antimony ores, copper ores, manganese ores, and one supposed bauxite. He also identified several mineral specimens.

E. A. Thompson made complete chemical analyses of ten samples of feldspar, nineteen samples of asbestos, and one mineral water. He also made several microscopic examinations, with photomicrographs, of specimens submitted by the Ore Dressing Division. He made a number of partial analyses necessary for identification and valuation of mineral specimens.

A. Sadler had charge of the furnace assays. He investigated the behaviour on heating with various re-agents of fourteen diatomites. Experiments were made on three silver-bearing ores to determine whether the sulphides of iron carried the silver values. He made numerous chemical analyses of the usual run of materials coming to the laboratory. These comprised: silica sands,

dolomites, magnesites, diatomaceous earths, graphites, clays, manganese ores, and bullion. He also assisted in the identification of mineral and rock specimens submitted by the general public.

James Moran has been mainly engaged on the analysis of the air sampled in the coal mines of western Canada. Two hundred and forty-five such samples have been analysed and reported on. He made partial analyses of a large number of limestones, assisted in the identification of minerals, and made tests of a number of rare or radioactive rocks and minerals. An investigation of the nature of the electric charge on insecticides, and the relation of this charge to the adhesive efficiency of such insecticides to foliage, was commenced and is not yet completed.

C. L. O'Brian was engaged in the analysis of limestones and dolomites collected by the Mineral Resources Division. He has been assisted during the latter part of the year by Mr. R. J. Young.

DOMINION OF CANADA ASSAY OFFICE, VANCOUVER, B.C.

The report of the Assay Office for the calendar year ending December 31, 1928, shows that the net value of gold bullion deposited during the year amounted to $1,673,926.65, as compared with $1,750,599.35 during the previous year.

The value of gold bullion deposited from British Columbia sources was $918,718.06, being a decrease of $126,037.05, the greater part of which is accounted for by a falling off towards the latter part of the year in the amount of gold received from the Consolidated Mining and Smelting Company of Canada, Trail, B.C. Owing to the diversion of the Granby Company's Copper Mountain concentrates from Trail to Tacoma the Copper Smelter and Electrolytic Copper Refinery at Trail are temporarily idle. It is reported, however, that the Consolidated will maintain its services for the district's copper operations and will continue in the market for copper ores, thus in the future probably producing an equivalent, if not a greater, quantity of gold bullion. There is also to be noted a further decline during 1928 in placer gold production in British Columbia.

Gold bullion from Yukon territory amounted to $693,765.40, an increase this year over 1927 of $44,262.68.

Deposits from all other sources totalled in value $61,443.19, an increase over the previous year of $5,101.67.

The purchase and disposal of the gold bullion deposits during the year 1928 required a total of 1,560 meltings and 1,560 assays, quadruplicate assays being made in each instance. This includes the melting into large bars of the smaller deposits after purchase, and the assaying of same before shipment.

The aggregate weight of all deposits before melting was 107,617·27 troy ounces, and after melting 98,425·51 troy ounces, included in which were 61 deposits containing a large proportion of lead requiring to be cupelled in a large muffle furnace. The total weight of these deposits before melting was 16,557·98 troy ounces and after melting and cupelling 9,097·32 troy ounces, showing a loss by melting and cupellation of 45·058 per cent.

The average loss in melting all other bullion deposited, viz., 91,059·29 troy ounces before melting and 89,328·19 troy ounces after melting, was 1·901 per cent.

The loss in weight by assaying (base and parted silver) was 32·53 troy ounces, making the weight of bullion after melting and assaying 98,392·98 troy ounces, the average fineness of same being 821½ gold and 130½ silver.

Very little platinum work was done during the year owing to the illness of the platinum metallurgist, and to the partial destruction by fire, on September 21, of the fume chamber in the platinum laboratory. Work on its reconstruction was commenced early in December.

Upon completion of the new fume chamber in the platinum laboratory, the fume chamber in the muffle furnace room in the assaying section will be demolished and a new one constructed in its place. Both old fume chambers were constructed many years ago and were transferred to their present quarters from the old premises.

The net value of the gold and silver contained in deposits was $1,673,926.65 and was received from the following sources:

—	Number of Deposits	Before melting and assaying	After melting and assaying	Net value
		Troy ozs.	Troy ozs.	$ cts.
Bars, nuggets, dust, and amalgam—				
British Columbia	390	56,661·06	48,724·77	918,718 06
Yukon Territory	390	42,993·43	42,440·34	693,765 40
Alaska	3	123·39	119·16	2,272 75
Washington	3	50·42	48·46	599 84
Alberta	4	76·85	75·08	1,394 58
Dental and jewellery scrap	691	7,712·12	6,985·17	57,176 02
	1,481	107,617·27	98,392·98	1,673,926 65

DRAUGHTING DIVISION

H. E. Baine, Chief Draughtsman, reports:

Maps Prepared for Publication During the Fiscal Year Ending March 31, 1929

Map No. 693. Mineral Map of Canada; scale 1 mile to 1 inch. Twelve maps to accompany "Industrial Fuel and Power Statistics for Ontario (Calendar year 1925)."

In Preparation

Map 703. Principal amber mica mines and occurrences in the province of Quebec; scale 3·95 miles to 1 inch.

Map 704. Principal amber mica mines and occurrences in the province of Ontario; scale 3·95 miles to 1 inch.

One hundred and thirty-nine page maps, drawings, charts, and flow-sheets were prepared during the year.

Nine hundred and ninety-five negatives, black and white and blue prints were made from the blue-print machine.

Twelve hundred and four negatives, and black and white prints were made from the photostat machine.

Three hundred and nine halftone blocks and zinc cuts were sent out, received, and filed during the year.

DISTRIBUTION OF PUBLICATIONS

During the fiscal year ending March 31, 1929, the distribution of Mines Branch reports, bulletins, memorandum series, press bulletins, maps, lists of mine operators, etc., amounted to 45,680 copies.

LIBRARY

Mrs. O. P. R. Ogilvie, Librarian, reports:

Accessions to the library, 1928:

Books (by purchase)	318
Books (by gift)	36
Books (by transfer from other Government libraries)	244
Books (complete unbound volumes)	270
Books added to the circulating division of library	122
Canadian Government documents (by exchange and gift)	1,722
British and foreign Government documents (by exchange and gift)	892
Scientific societies, bulletins, proceedings, and transactions (by exchange and gift)	1,311
Pamphlets (by gift)	42
Pamphlets (by transfer from other Government libraries)	102
Trades catalogues (by gift)	116

During the year 342 books were bound.

Accessions to the library were appreciably increased by transfers from other Government libraries. Approximately seven hundred pamphlets were received in this way, which were subsequently passed along to other libraries.

Requests for reports and monographs issued by the Mines Branch and now out of print have been more frequent during 1928 than for any other year, and much time has been given to supplying inquirers through the circulation division of the library, which was inaugurated in 1926 to meet this emergency.

Further progress has been made toward the general readjustment of the library, which was undertaken late in 1927.

EXPLOSIVES DIVISION

Lt.-Col. G. Ogilvie, Chief Inspector of Explosives

Explosives Factories

Two new factories were licensed during the year under review. The Mexco Company opened a factory near Parry Sound, Ontario, following on the closing of the one at Swastika, Ontario, and the Macdonald Metal Products Company established a factory for the making of caps for toy pistols in conjunction with their workshops at Waterloo, Quebec. This special section was licensed on January 1, 1929.

The production of explosives in 1928 showed an increase of approximately 15 per cent above that in 1927.

No accident involving loss of life or serious injury occurred during the year ending March 31, 1929. A rapid chemical reaction and explosion in the conduct of certain experimental work in a factory laboratory caused an outbreak of fire that destroyed the building, and by which a chemist sustained minor injuries. A glaze mill in the factory of the Canadian Explosives, Limited, at Beloeil, Quebec, was struck by lightning, and its contents, amounting to about 8,700 pounds of sporting and fuse powders, were exploded. The power had been shut off and employees cleared from the building when the storm developed. An employee in another building was slightly burned with acid, owing to the breaking of a glass tube by the explosion. The glaze mill was completely destroyed, but the barricades around it, although themselves practically razed to the ground, sufficed to save other factory buildings from damage, except of a minor character.

A soda dry house, in the factory at James Island, B.C., was destroyed by fire. It arose from the outlet plug of a car, containing molten nitre-cake, being jarred loose when the car was passing over points, near the soda house, and the molten nitre cake coming in contact with the wooden floor of the soda house.

At the same factory a charge of 500 pounds of black powder mixing, in a wheel mill, exploded on the mill being started. The employees being under cover when a mill is running, no one was injured. The cause was not definitely ascertained, but it is probable that friction set up by a sliding action of the wheel, on starting, contributed to the ignition.

Magazines

There were 282 magazines under licence on March 31, 1929, and licences for 190 temporary magazines had been granted during the year.

Reports were received of eight magazines being forcibly entered. From one, 21 cases of dynamite were stolen. The losses from the others were small, totalling 500 pounds of explosives and 200 detonators. With the exception of one, which was of temporary character and light construction, all were strongly built magazines. At the same time it is to be remembered that magazines must be in more or less isolated locations.

Explosives Condemned

Explosives amounting to 1,500 pounds and 3,000 detonators, distributed over 19 magazines, were condemned on inspection and destroyed.

In addition, 500 pounds of dynamite, abandoned in the bush, were traced by the Royal Canadian Mounted Police, who also located several small quantities of dynamite and detonators left in various parts of the country. These abandoned explosives were destroyed.

Prosecutions

Prosecutions were made and convictions obtained in nine cases. Two of these were on charges of keeping explosives in licensed magazines in excess of the quantity prescribed by the licence. Two arose from violation of the regulations regarding the conveyance of explosives, and five related to the keeping of explosives in unlicensed premises. A further case, in this last category, was heard and decision is awaited.

In addition to these a case against a person for the unlawful keeping of explosives in a quarry—not in operation—was dismissed by the magistrate, and is the subject of appeal.

In another case a charge of unlawful keeping of explosives was dismissed.

Importations

A total of 654 permits for importation and 42 special permits, were issued during the year. The rejections of Chinese fireworks continued to be heavy for the first few months, but since then have been very few—owing partly to an evident care being taken by the Chinese exporters to ship only authorized fireworks to Canada, also to the co-operation given by wholesale dealers in the United States in their preliminary examination of Chinese shipments *before forwarding* supplies to Canadian dealers. A particularly useful service has been rendered by the Royal Canadian Mounted Police and the analyst of the Department of Health, at Vancouver, in conducting the examination of shipments in co-operation with the Customs officers.

Authorization of Explosives

Five new explosives were submitted for examination, one authorized and four rejected. Of manufactured fireworks 115 varieties presented were authorized and 144 rejected.

Accidents

Accidents, with explosives, which occurred during the year 1928, have been classified according to their circumstances and probable causes, and are given in the annual report for the division. Those occurring in the use of explosives, and under other circumstances not directly controlled by the Act, were responsible for the death of 64 persons and injury to 192 others. This is a marked increase on the list for the preceding year, and, allowing for the increase in quantity of explosives used, is just proportional to the losses sustained during the five year period prior to 1928. Included in the above are accidents caused by playing with explosives which resulted in the death of 7 persons and injury to 80. The victims were almost all young lads or children and the casualties were very nearly equally divided between " playing with detonators " and " playing with other explosives ".

In a constant effort to combat this the enforcement of the regulations relating to the safe keeping of explosives is supplemented by the instructions and warnings given by school teachers, by the Royal Canadian Mounted Police, and by the activities, notably in the province of Quebec, of the Safety League.

General

In carrying out the inspections of licensed magazines, valuable assistance has been given by deputy inspectors of explosives of the Royal Canadian Mounted Police, without whose aid it would not be practicable adequately to cover the ground. In the wider field of inspections of unlicensed premises 2,500 inspections were made by these deputy inspectors and 700 by inspectors of the division. In but very few cases has it been found necessary to have recourse to prosecution to enforce compliance with the regulations, explanation of the purpose of the regulations and of their requirements generally having the desired effect.

EDITORIAL DIVISION

F. Nicolas, Editor-in-Chief

During the fiscal year forty-one separate English publications were issued by the Department, consisting of annual reports, memoirs, bulletins, and pamphlets; there were issued also ten lists of mine operators and mines. Six reports and fourteen pamphlets were published in French.

At the end of the fiscal year there were in the hands of the King's Printer seven English reports and one French translation of the Geological Survey, nine English reports and one French translation of the National Museum, two English reports and one French translation of the Mines Branch, and one English report of the Explosives Division. Several reports, also, were being edited preparatory to dispatch for printing, and several French translations are now nearly ready for the printer.

The following list includes the publications issued by the various branches of the Department during the fiscal year, under the supervision of the Editor-in-Chief, and the French publications distributed[1] during that period:

DEPARTMENT OF MINES

English Publications

Report No.

2182. *Report of the Department of Mines for the Fiscal Year ending March 31, 1928:* 65 pages; 1 plate; 1 figure; 3,000 copies; published March 18, 1929.

The Mineral Industries of Canada Reach from Coast to Coast (Second advertisement pamphlet relating to the Department of Mines): 15 pages; 13 plates; 3 figures; 2,800 copies; published November 16, 1928.

French Translations

Liste des Publications françaises du Ministère des Mines: 6 pages; 800 copies; published September 5, 1928.

GEOLOGICAL SURVEY

English Publications

2128. Economic Geology Series 5. *Oil and Gas in Western Canada*—by G. S. Hume: 152 pages; 14 figures; 2,500 copies; published September 14, 1928.

2132. Memoir 154. Geological Series 135. *Geology of Anticosti Island*—by W. H. Twenhofel: 481 pages; 60 plates; 1 figure; 1,000 copies; published August 30, 1928.

2140. Bulletin 49. Geological Series 48. *Contributions to Canadian Palæontology*—by A. Wetmore, F. A. Bather, A. F. Foerste, E. M. Kindle, F. H. McLearn, and W. A. Bell: 67 pages; 18 plates; 3 figures; 1,500 copies; published July 16, 1928.

2162. *Summary Report of the Geological Survey, Department of Mines, for the Calendar Year 1927, Part A:* 65 pages; 6 figures; 2 maps; 3,000 copies; published February 4, 1929.

2171. *Summary Report of the Geological Survey, Department of Mines, for the Calendar Year 1927, Part C:* 124 pages; 2 plates; 4 maps, 3,000 copies; published January 19, 1929.

Separate: *Geology of North Mountain, Cape Breton*—by T. D. Guernsey: 36 pages; 1 map; 200 copies; published February, 1929.

[1] The distribution of English publications was made as usual by the branches that prepared them.

Report No.

2172. *Summary Report of the Geological Survey, Department of Mines, for the Calendar Year 1927, Part B:* 94 pages; 4 figures; 2 maps; 3,000 copies; published January 30, 1929.

Separate: *Oil Prospects near Bragg Creek, Alberta*—by G. S. Hume: 20 pages; 3 figures; 500 copies; published June 11, 1928.

List of Publications of the Geological Survey and National Museum: 15 pages; 1,000 copies; published December 31, 1928.

French Translations

2147. Mémoire 152. Série géologique 133. *La région de Saint-Urbain, district de Charlevoix, Québec*—by J. B. Mawdsley: 64 pages; 2 plates; 9 figures; 1 map; 1,000 copies; published September 24, 1928.

2163. *Rapport sommaire de la Commission géologique, Ministère des Mines, pour l'année civile 1926, Partie C* (extraits): 71 pages; 9 figures; 1,250 copies; published March 30, 1929.

NATIONAL MUSEUM OF CANADA

Report of the Canadian Arctic Expedition 1913-18[1]: Volume IV: *Botany*, Part B: *Marine Algæ:* 31 pages; 2 plates; 4,500 copies; published April 10, 1928.

Report of the Canadian Arctic Expedition 1913-18[1]: Volume XV; *Eskimo Language and Technology*, Part A: *Comparative Vocabulary of the Western Eskimo Dialects*—by D. Jenness: 134 pages; 5,000 copies; published January 18, 1929.

Bulletin 41. Biological Series 10. *Birds of Western Canada*—by P. A. Taverner. Second Edition (revised): 379 pages; 84 plates; 315 figures; 10,000 copies; published December 15, 1928.

Bulletin 50. *Annual Report for 1926:* 126 pages; 19 plates; 1 figure; 3,500 copies; published October 20, 1928.

Separate: *The National Museum of Canada*—by W. H. Collins: 39 pages; 10 plates; 1 figure; 1,000 copies; published February 28, 1929.

Separate: *Archæological Investigations in Bering Strait*—by D. Jenness: 10 pages; 3 plates; 100 copies; published October 22, 1928.

Separate: *Restoration of Totem-Poles in British Columbia*—by H. I. Smith: 3 pages; 100 copies; published October 26, 1928.

Separate: *Commercial Bent Grasses (Agrostis) in Eastern Canada*—by M. O. Malte: 22 pages; 6 plates; 300 copies; published November 25, 1928.

Bulletin 51. Anthropological Series 10. *Uren Prehistoric Village Site, Oxford County, Ontario*—by W. J. Wintemberg: 97 pages; 23 plates; 3 figures; 1,000 copies; published November 27, 1928.

Bulletin 52. Biological Series 14. *The Lepturini of America North of Mexico, Part I*—by J. M. Swaine and Ralph Hopping: 97 pages; 13 plates; 1,000 copies; published October 26, 1928.

MINES BRANCH

English Publications

686. *Silica in Canada: Its Occurrence, Exploitation, and Uses, Part II—Western Canada*—by L. Heber Cole: 59 pages; 6 plates; 7 figures; 4,000 copies; published May 25, 1928.

687. *Investigations of Mineral Resources and the Mining Industry, 1926:* 80 pages; 7 plates; 6 figures; 4,000 copies; published September 28, 1928.

688. *Investigations in Ore Dressing and Metallurgy, 1926:* 134 pages; 5 plates; 4,000 copies: published September 10, 1928.

Report No.

689. *Investigations of Fuels and Fuel Testing, 1926:* 132 pages; 7 plates; 16 figures; 4,000 copies; published September 25, 1928.

Separate: Part I—*Solid Fuels:* 87 pages; 3 plates; 10 figures; 500 copies; published September 12, 1928.

Separate: Part II—*Liquid Fuels:* 47 pages; 4 plates; 6 figures; 500 copies; published September 12, 1928.

[1] The Arctic reports were published under the supervision of R. M. Anderson, Chief, Biological Division, National Museum of Canada, as general editor of the Arctic Publications Committee.

Report No.

690. *Investigations in Ceramics and Road Materials, 1926:* 70 pages; 1 figure; 4,000 copies; published July 20, 1928.

691. *Diatomite: Its Occurrence, Preparation, and Uses*—by V. L. Eardley-Wilmot: 182 pages; 15 plates; 31 figures; 1 map; 4,000 copies; published December 11, 1928.

694. *Investigations of Mineral Resources and the Mining Industry, 1927:* 60 pages; 11 plates; 7 figures; 4,000 copies; published March 1, 1929.

Price List of Mines Branch Publications: 10 pages; 1,000 copies; published March 1, 1929.

Peat Fuel Circular: 1 page; 5,000 copies; published August 22, 1928.

Peat Fuel Poster: 1 page; 1,000 copies; published August 25, 1928.

Peat Fuel Folder. Directions for Domestic Use of Peat Fuel: 3 pages; 5,000 copies; published August 24, 1928.
Reprint: 10,000 copies; published February 22, 1929.

Lists of Mines and Mine Operators in Canada:

Milling Plants: 1,000 copies; published June 14, 1928.

Metallurgical Works: 1,000 copies; published June 15, 1928.

Iron: 1,000 copies; published July 3, 1928.

Molybdenum, Antimony, and Tungsten: 1,000 copies; published July 3, 1928.

Copper and Nickel-Copper: 1,000 copies; published July 13, 1928.

Silver-Lead-Zinc: 1,000 copies; published August 28, 1928.

Silver: 500 copies; published September 6, 1928.

Natural Gas and Petroleum Wells: 1,500 copies; published September 12, 1928.

Gold: 1,000 copies; published September 14, 1928.

Mineral Pigments: 1,000 copies; published February 22, 1929.

French Translations

Report No.

683. *Rapport préliminaire sur les calcaires des provinces de Québec et d'Ontario*—by M. F. Goudge: 81 pages; 16 plates; 3 figures; 1,250 copies; published March 30, 1929.

Tourbe Combustible (Circular): 1 page; 5,000 copies; published September 1, 1928.

Tourbe Combustible (Poster): 1 page; 1,000 copies; published September 1, 1928.

Directions pour l'usage de ménage de la tourbe combustible: 3 pages; 5,000 copies; published September 10, 1928.
Reprint: 10,000 copies; published February 22, 1929.

DOMINION FUEL BOARD

English Publications

1. *Interim Report of the Dominion Fuel Board 1923* (Second edition): 31 pages; 4 figures; 4 maps; 1,000 copies; published August 28, 1928.

10. *Second Progress Report of the Dominion Fuel Board 1923-1928:* 57 pages; 5 plates; 1 figure; 1 map; 25,000 copies; published December 31, 1928.

Changes in the Fuel Situation in Canada—by Charles Camsell: 3 pages; 1,000 copies; published December 6, 1928.

French Translations

9. *Avantages qu'offrirait l'isolation thermique de votre maison* (Second edition): 16 pages; 7 drawings; 5,000 copies; published August 1, 1928.

La tourbe combustible est maintenant fabriquée à Alfred (for Natural Resources Intelligence Service, Department of the Interior): 3 pages; 25 typewritten copies; published September 25, 1928.

Suggestions sur la manière de brûler la tourbe (for Natural Resources Intelligence Service, Department of the Interior): 3 pages; 18 typewritten copies; published October 10, 1928.

EXPLOSIVES DIVISION

English Publications

Report No.

23. *Annual Report of the Explosives Division for the Calendar Year 1927:* 23 pages; 2,000 copies; published June 15, 1928.

Reprint: *Beware of Explosives:* 3 pages; 20,000 copies; published December 1, 1928.

Order in Council No. 472 with Subsequent Amendments: 4 pages; 4,000 copies; published February 4, 1929.

French Translations

24. *Rapport annuel de la Division des Explosifs pour l'année civile 1927:* 22 pages; 1,000 copies; published September 14, 1928.

Reprint: *Méfiez-vous des Explosifs:* 3 pages; 5,000 copies; published December 1, 1928.

Arrêtés du Conseil nos 361-363, 469, 470, 482, 2601, 2602: 1,000 copies of each; published February 4, 1929.

Arrêté du Conseil no 472: 4,000 copies; published February 4, 1929.

DISTRIBUTION OF FRENCH PUBLICATIONS

The French publications of the Department of Mines, including those of the Geological Survey, the Mines Branch, and the Explosives Division, are distributed by the Editorial Division. During the fiscal year 1928-29, 16,199 copies were distributed in Canada and foreign countries, as follows: 3,241 to addresses on the mailing lists, through the Printing Bureau Distribution Office; 3,868 copies in compliance with written or personal requests, distributed from our distribution office; and approximately 9,000 copies of a revised edition of the pamphlet on "Instructions for Burning Coal, Coke, and Peat" to coal dealers. This distribution does not include, however, the publications sent out by the Dominion Fuel Board and the Explosives Division.

ACCOUNTING DIVISION

ACCOUNTANT'S STATEMENT

P. R. Marshall

The funds available for the work and the expenditure of the Department of Mines for the fiscal year ending March 31, 1929, were:

—	Grant	Expenditure	
		Amount	Total
	$ cts.	$ cts.	$ cts.
DEPARTMENT—			
Amount voted by Parliament	112,074 00		
Civil Government salaries		73,493 58	
Grant to Imperial Institute		12,848 00	
Expenses of Explosives Division		11,999 99	
Civil Government contingencies		6,416 85	
Grant to Canadian Institute of Mining and Metallurgy		3,000 00	107,758 42
Balance unexpended and lapsed			4,315 58
GEOLOGICAL SURVEY—			
Amount voted by Parliament	658,045 00		
Civil Government salaries		304,043 54	
Explorations, surveys, and investigations		177,665 32	
Wages		55,152 81	
Publication of reports and maps		49,936 71	
Sundry printing and stationery		19,011 59	
Museum equipment		14,610 35	
Miscellaneous		4,805 49	
Instruments and repairs		2,837 22	
Specimens for Museum		2,299 09	
Petrographic laboratory		2,063 44	
Photographic supplies		1,379 35	
Miscellaneous gratuity		230 00	
			634,034 91
Balance unexpended and lapsed			24,010 09
MINES BRANCH—			
Amount voted by Parliament	654,460 00		
Civil Government salaries		193,366 50	
Expenses of fuel testing plant and laboratory		76,109 33	
Expenses of ore dressing and metallurgical laboratories		49,287 97	
Operation of peat plant, Alfred, Ont		45,024 12	
Printing and stationery		34,919 45	
Expenses of Dominion Fuel Board		23,692 81	
Subvention on Canadian coals		23,318 27	
Investigation of mineral resources and deposits $23,583 06			
Less advances 1927-28 1,300 00			
		22,283 06	
Chemical laboratories		18,066 33	
Wages		14,593 31	
Miscellaneous		3,712 98	
Transportation charges on ore shipments		637 50	
Compensation to J. H. Fortune		400 00	
Advances to be accounted for in 1929-30		1,622 44	
			507,034 07
Balance unexpended and lapsed			147,425 93
DOMINION OF CANADA ASSAY OFFICE—			
Amount voted by Parliament	27,140 00		
Earnings	58 75		
Salaries of staff		20,625 00	
Assayers' supplies		1,633 55	
Miscellaneous		727 52	
Electric burglar alarm service		360 00	
Premium on bonds		462 50	
			23,808 57
Balance unexpended and lapsed			3,390 18
	1,451,777 75		1,451,777 75

Summary

—	Grant	Expenditure	Grant not used
	$ cts.	$ cts.	$ cts.
Civil Government salaries	612,400 00	570,903 62	41,496 38
Department	34,549 00	34,264 84	284 16
Geological Survey	331,000 00	329,761 37	1,238 63
Mines Branch	446,400 00	313,667 57	132,732 43
Dominion of Canada Assay Office, Vancouver, B.C. $ 27,140 00			
Earnings 58 75			
	27,198 75	23,808 57	3,390 18
Miscellaneous gratuities	230 00	230 00	
	1,451,777 75	1,272,635 97	179,141 78

Casual Revenue

Sales of equipment, explosive permits, publications, etc		$ 2,149 24
Sales of peat		1,654 96
Gold bullion recovered from residue	$ 502 54	
Less loss on gold bullion	282 26	220 28
Fines for violation of Explosives Act		75 00
Miscellaneous		158 05
		$ 4,257 53

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REPORT

OF THE

MINISTER OF AGRICULTURE

FOR THE

DOMINION OF CANADA

FOR THE

YEAR ENDED MARCH 31, 1929

OTTAWA
F. A. ACLAND
PRINTER TO THE KING'S MOST EXCELLENT MAJESTY
1929

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REPORT

OF THE

MINISTER OF AGRICULTURE

1928-1929

To His Excellency the Right Honourable Viscount Willingdon, G.C.S.I., G.C.M.G., G.C.I.E., G.B.E., Governor General and Commander in Chief of the Dominion of Canada.

MAY IT PLEASE YOUR EXCELLENCY:

I have the honour to submit to your Excellency a report of the Department of Agriculture for the fiscal year ending March 31, 1929.

The work of the department was carried out in a most satisfactory and efficient manner and there will be found included a summary of the operations of the different branches of the department, all of which is laid before your Excellency under the respective headings.

The following Orders in Council establish new regulations or amend existing regulations under the various acts and policies administered by the department.

By Order in Council P.C. 559 of April 12, 1928, the regulations under the Destructive Insect and Pest Act were amended to make certain changes in the regulations governing the admission of nursery stock into the Dominion from foreign countries.

By Order in Council P.C. 28, of June 8, 1928, the regulations under the Fruit Act were amended in order to provide that gift packages of fruit should not be subject to the regulations under the Fruit Act.

By Order in Council P.C. 1815 of November 3, 1928, regulations were established governing the inspection of dressed poultry.

By Order in Council P.C. 228 of December 11, 1928, the administration of that part of the Meat and Canned Foods Act dealing with canned fruits, vegetables and milk was transferred from the Health of Animals Branch to the Fruit Branch of this department.

By Order in Council P.C. 42 of January 14, 1929, the regulations governing the inspection of canned milk and dried milk products was transferred to the Dairy and Cold Storage Branch of this department.

By Order in Council P.C. 256 of February 13, 1929, certain regulations governing the grading of beef were established under the provisions of the Live Stock and Live Stock Products Act.

By Order in Council P.C. 328 of March 11, 1929, new regulations governing the grading of hogs were established under the Live Stock Branch.

The only legislation passed at the 1929 session of Parliament was an Act to amend the Vegetables Act, the chief provision of which was that grades and standards for root vegetables, that is potatoes, onions, etc., can now be established by the minister rather than by Order in Council.

DOMINION EXPERIMENTAL FARMS AND STATIONS

In Eastern Canada the spring was cold and backward with frost and moisture delaying operations on the land. The season was well advanced before all the crops were sown. Pastures generally were excellent but the heavy rains during the growing season in Ontario and Quebec resulted in some disappointing yields of cereal crops. In the Atlantic provinces most crops gave satisfactory yields. Seeding commenced somewhat later than usual in Western Canada, but the crop went in on an excellent seed bed in May. Unfortunately frosts occurred in the latter part of August over widespread areas in Saskatchewan and Alberta and caused considerable loss both in grades and yields. In British Columbia the season generally was satisfactory. The total value of all field crops in 1928 is estimated by the Dominion Bureau of Statistics at $1,099,781,000, as compared with $1,172,643,600 in 1927.

AREAS AND ESTIMATES OF YIELD AND VALUE OF FIELD CROPS, 1928

Crop	Area	Yield per acre	Total yield	Weight per measured bushel	Average price per bushel	Total value
	acres	bush.	bush.	lbs.	$	$
Fall wheat	819,028	24·5	20,054,000	59·67	1·15	23,009,000
Spring wheat	23,300,112	22·0	513,517,700	59·75	0·78	403,004,000
All wheat	24,119,140	22·1	533,571,700	59·74	0·80	426,013,000
Oats	13,136,516	34·4	452,153,000	34·62	0·47	210,956,000
Barley	4,880,740	27·9	136,391,400	47·04	0·56	76,112,000
Rye	839,565	17·4	14,617,700	55·44	0·79	11,491,000
Peas	154,469	16·8	2,588,300	59·42	1·85	4,786,000
Beans	70,276	16·7	1,170,500	59·82	3·57	4,184,000
Buckwheat	502,729	21·7	10,899,300	47·45	0·93	10,128,000
Mixed grains	1,107,135	35·3	39,130,000	42·15	0·71	27,672,000
Flax seed	378,081	9·6	3,614,000	55·16	1·59	5,758,000
Corn for husking	139,192	37·7	5,241,000	53·19	1·12	5,860,000
		cwt.	cwt.		per cwt.	
Potatoes	599,063	83·8	50,195,000	.....	0·81	40,874,000
Turnips, mangels, etc.	202,447	215·5	43,623,000	.....	0·47	20,700,000
		tons	tons		per ton	
Hay and clover	10,320,863	1·60	16,515,000	.....	10·37	171,225,000
Fodder corn	440,898	8·32	3,666,400	.....	4·69	17,204,000
Sugar beets	51,294	8·44	433,000	.....	7·25	3,140,000
Alfalfa	853,818	2·35	2,009,500	.....	11·51	23,138,000

NUMBERS OF LIVE STOCK IN THE DOMINION, 1924–1928

—	1924	1925	1926	1927	1928
Horses	3,588,788	3,544,041	3,398,114	3,421,857	3,376,394
Milch cows	3,726,985	3,830,175	3,839,191	3,894,311	3,792,522
Other cattle	5,733,851	5,477,123	4,731,688	5,277,927	5,000,750
Sheep	2,684,743	2,755,556	3,142,476	3,262,706	3,415,788
Swine	5,069,181	4,426,148	4,359,582	4,694,789	4,497,367

PUBLICATIONS ISSUED

In addition to the regular issues of "Seasonable Hints" and the sending out of several hundred press articles, the following bulletins, pamphlets, and circulars were issued during the year:—

BULLETINS, NEW SERIES

No. 100 The Soils of Prince Edward Island, Their Nature and Composition, with Suggestions as to Fertilizer Treatment.
No. 103 Poultry Breeding Records.
No. 104 Studies in Forest Pathology I, Decay in Balsam Fir.
No. 105 Seedling Blight and Foot Rots of Oats.
No. 106 Stem Rust in Western Canada.
No. 107 Standard Descriptions of Vegetables—Peas.
No. 108 Sixth, Seventh and Eighth Canadian Egg Laying Contests.
No. 110 Studies in Strawberry Bud Differentiation.
No. 111 Studies in Forest Pathology II, The Biology of *Fomes Pinicola* (SW.) Cooke.
No. 113 Herbaceous Perennials.
No. 114 The Raspberry and Its Cultivation in Canada.
No. 115 The Cost of Producing Farm Crops in Eastern Canada.

PAMPHLETS, NEW SERIES

No. 93 Soybeans in Canada.
No. 96 Nitrogen, Phosphoric Acid and Potash Starvation at Different Stages of the Growth of Fragaria.
No. 100 Tomato Culture.
No. 104 The Yellow Disease of Hyacinths.
No. 105 Black Leg Disease of Potatoes.

CIRCULARS, NEW SERIES

No. 63 How to make and use Hot Beds and Cold Frames.
No. 64 The Washing and Sterilization of Farm Dairy Utensils.
No. 65 The Red Currant and the White Currant—Their Place in Quebec's Horticulture.
No. 66 The Control of Loose Smut in Wheat.
No. 67 Trapping Moles.
No. 69 Ergot.

CENTRAL EXPERIMENTAL FARM

DIVISION OF ANIMAL HUSBANDRY

Horses.—Six foals were raised during the year, and eleven mares are now in foal to the Clydesdale stallion Sandy Mac (imp.), the policy being to develop at home, as far as possible, the horses required at the Central Experimental Farm. The working force is not only used for the performance of labour, but also forms the basis of records of costs of labour and maintenance and, to a limited extent, is used for experimental feeding purposes. Methods of preventing common foaling troubles have been given further study.

Beef Cattle.—For several years now this Division has made a practical study of the business of growing and finishing western stockers in Ontario and as a result of this work it may be stated that for greatest returns spring purchased Western Stockers invariably should arrive in the East before the grazing season starts, preferably in late March or April. One hundred and nineteen head purchased in April, 1928, and sold during the following September, December and January returned a gross profit of $3,355.08 in spite of the fact that four head were lost outright and four more were partial losses.

Dairy Cattle.—Ayrshires and Holsteins are the only two breeds of dairy cattle now kept at the Central Farm, the Jerseys having been transferred to the Lennoxville Experimental Station, the latter Station in return transferring thirty-one Ayrshires to Ottawa. A draft of fifteen head of Holsteins was also received from the Agassiz Experimental Farm and district. In addition a high class bull has been purchased. The acquisition of a large area of land has made it possible for the first time, to provide the dairy cattle with adequate grazing conditions during the whole season. As a result there has been a marked improvement both in health and economy of production in the herd. The problem

of contagious abortion control is being studied in co-operation with the Health of Animals Branch. A number of feeding tests are under way having as their object the lowering of milk production costs under present conditions.

Sheep.—The flock of pure-bred Shropshires was augmented during the year by the importation of two choice rams from Scotland. There is also a flock of pure-bred Leicesters as well as cross-bred and grade ewes and lambs. Particular attention has been given to a demonstration of the possibilities in Eastern Canada of fairly large flocks, and with the excellent range facilities now available and with better opportunity for adequate winter quarters it is planned to increase the scope of this work.

Swine.—One of the main items of interest in the year's work has been the preliminary study of the scheme for Advanced Registration of Swine. A pamphlet covering this work has been prepared. The objective is to give some form of recognition to brood sows on inspection and proof that their pigs subscribe to market ideals, as indicated by the slaughter test. In addition to several feeding experiments further attention has been given to the study of practical ways and means of controlling parasites.

There was a decrease in the output of butter and cheese due to a shortage of milk. With the co-operation of the Division of Bacteriology a further study was made of milking machines in relation to clean milk production.

Division of Field Husbandry

Information obtained from extensive experiments with silage crops conducted over a long period of years on Dominion Experimental Farms in various parts of Canada indicates that corn is superior to sunflowers wherever it produces a sufficiently heavy yield per acre. The factors in favour of corn as compared with sunflowers are that it produces a somewhat superior silage, is slightly easier to harvest, and, in the prairie provinces, leaves the land in a much better condition to produce a crop the following year. This latter point, however, has not been evident in the humid regions of Eastern Canada. In cooler regions, sunflowers are decidedly superior to corn for silage, and on heavy clay soil at the Central Experimental Farm at Ottawa have given much heavier yields. On sandy loam soil corn has given the larger yield.

The Ronning Ensilage Harvester, a machine which takes the place of the corn binder and silage cutter, has been under test at the Central Experimental Farm since 1925. The total cost of ensiling by this method, even considering the more expensive machinery involved, is considerably lowered on account of the great saving in manual labour. A fairly large acreage of corn is required to justify the operation of this outfit and it can be used only for corn and sunflowers.

With some of the legume crops more difficulty is experienced in making a satisfactory silage than is found with corn or sunflowers, and many enquiries on this subject have been received in recent years. Since 1924 the Division of Field Husbandry has been conducting a series of experiments designed to learn the most satisfactory methods of ensiling sweet clover, alfalfa, red clover, alfalfa and a mixture of oats, peas and vetches. The results of these experiments show that sweet clover makes an excellent silage if cut when half the plants are showing the blossoms. It should not be allowed to wilt in the hot sun in the field longer than three or four hours. When cut in the full bloom stage, and especially when cut one week after full bloom, the palatability is impaired and there is more opportunity for the development of dangerous molds. Red Clover when cut in the full bloom stage contains its maximum amount of digestible nutrients and makes excellent silage. In regions where the temperatures are

quite cool a mixture of oats and peas, or of oats, peas and vetches will give better results than either sunflowers or corn, and have the added advantage of being suitable for hay if they are not required as silage. When the crop is cut in the proper stage that is when the oats are in the dough stage or when the first faint signs appear of the crop beginning to change from a green to a ripe colour, it is both unnecessary and unwise to add water to it when ensiling. Many methods of ensiling alfalfa have been tried, but so far there are only two which offer any promise of success and these have not been tried long enough to warrant any definite pronouncement. As alfalfa produces such an excellent quality of hay it is advisable under most circumstances to use it for this purpose.

Division of Horticulture

An effort is being made by this Division to establish a vegetively produced apple stock, with the object of eliminating much of the variation due to the use of unselected seeding stock. A large number of seedlings of Aris have been layered and notes taken as to their rooting propensities. This variety has been selected as the seed parent because it has proved a very hardy Russian sort, producing seedlings with as little variation as any variety we have tried. Of the 175 stools laid down 76 have been retained for vegetative propagation.

Results obtained from the closely planted wealthy orchard, planted in 1896, show that by planting ten by ten feet the maximum yearly production of 175 barrels per acre was reached six years after planting, as compared with over twice that length of time required to reach the same production when planted at standard distances. Average profits per acre per year were $171.64.

The work with self-fertilization for the origination of homozygous or true breeding strains of strawberries is progressing very favourably. A few lines are giving a large percentage of progeny of good vigor and large size. Crosses have been effected between a number of varieties introduced from California, Chili, and Central America and the most desirable American types. A few of the combinations gave promise of being worthy of a further trial.

For the past two years tests have been conducted in the use of paper as a mulch in growing vegetables. The results indicate that the effects of the paper tend to show more in the early part of the season, but costs are heavy and further experiments are necessary to determine what crops, if any, can be grown economically by this method.

The Division of Horticulture again assisted the Seed Branch and the Canada Seed Growers' Association towards simplifying the list of varieties of vegetables recommended for planting with the object of encouraging the growing of vegetable seed in Canada of those kinds and varieties thought desirable.

Among the new varieties of vegetables originated in the Division which have given a good account of themselves, mention might be made of Ruby rhubarb, a red variety which comes truer from seed than many and is very useful in establishing new plantations in outlying districts. The Herald tomato and Banting corn also drew much favourable comment.

The ornamental grounds at the Central Experimental Farm have attracted a great deal of attention. The collections of herbaceous plants and ornamental trees and shrubs are well labelled and in this way the large number of visitors are enabled to make notes on the varieties which please them most. A few of the best of the eighty or more species of plants grown experimentally for hedge purposes are the Japanese Barberry, Siberian Pea Tree or Caragana, Wayfaring tree and American Arbor-vitae. The new varieties of roses, lilacs, ornamental crab apples, lillies and Columbine also attracted much attention.

In the greenhouse an endeavour is being made to obtain a variety of head lettuce which might compete with the imported lettuce. A fine type of greenhouse cucumber has been produced and also a very promising tomato.

Among the varieties of chrysanthemums named during the year were the Austin Chamberlain, Ivy Chamberlain, Sir William Clark, Lady Clark, Mrs. W. R. Motherwell, and Susan Leesching.

The breeding of new varieties of fruits is also being carried on in the greenhouse.

There has been such a heavy demand for Bulletin 77, "Preserving Fruits and Vegetables in the Home," that it was necessary to publish a new and revised edition in 1928. Other publications issued during the year are Pamphlet 96, N.S., "Nitrogen, Phosphoric Acid and Potash Starvation at Different Stages of the growth of Fragaria"; Bulletin 107, N.S., "Standard Descriptions of Vegetables—Peas, the second of this series. Another publication of a scientific natures now in the press and will shortly be issued as

A technical article dealing with nutrient rates for the strawberry was published in "Scientific Agriculture" for March, 1928.

Cereal Division

The most outstanding feature of the work of the Cereal Division during the past year was the introduction of Reward wheat into Western Canada, climaxing over twenty years' work. This new variety is the product of an artificial crossing between Marquis and Prelude. It is notable for its outstanding high quality for bread-making; its fine appearance and high weight per measured bushel; the degree to which it seems able to cope with wheat stem rust; its superior strength of straw, and its ability to mature approximately one week ahead of Marquis, Canada's standard variety. It will make it possible and profitable to grow a high quality bread wheat in districts where previously it has been a very precarious undertaking. It sems likely that this variety will assume first place in many districts, especially on summer-fallow land.

Distinct progress has been made in the breeding of wheat capable of resisting stem rust. This work has been under way since 1923 and gives every promise of producing results.

The Cereal Division, the branch Farms, and the Provincial Department are co-operating in an undertaking which has as its objective the drafting of a map divided into districts or zones within each of which will be inscribed the names of those varieties which have given the best all-round results. As a result of co-operative tests conducted by farmers within these districts sufficient information has been recorded to permit the preparation of a tentative map at least. Further tests carried out with Garnet wheat, not only as to its field performance, but also in regard to its milling and baking qualities, have amply verified our earlier conclusions that this variety is a most valuable contribution to the western wheat grower. Garnet has a keen competitor in Reward, but it will require at least another year or so to demonstrate which variety is the safer and more profitable to grow in any given district.

Considerable attention has also been given to the production of barley of a quality capable of producing malt suitable for brewing purposes in Great Britain as well as in Canada. A fairly promising report has been received from an English malster to whom a small trial shipment of Trebi barley was made early in the season. The barley samples which this Division assembled and forwarded to the Annual Brewers' Exhibition which was held in London, England, last November, attracted very considerable attention, and it is apparent that old country malsters are becoming interested in Canada as a possible source of supply.

An attempt is being made to standardize descriptions of our leading wheat varieties and in this connection the Division issued during the year the first section of a monograph in the form of a detailed description, accompanied by coloured plates, of Marquis wheat.

Assistance was also given on a much larger scale than ever before to those engaged in the production of Elite Stock Seed and Registered Seed.

Division of Forage Plants

With a larger area of land now available at the Central Experimental Farm, Ottawa, there has been a corresponding increase in forage plant breeding work. Recombinations of some of the most desirable inbred strains of both corn and sunflowers are showing marked improvement over checks seeded with commercial mixtures. Good progress has also been made in the breeding of improved strains of sugar beets, some of which are continuing to yield profitable increases of sugar over the product of the best commercial seed.

Definite progress has been made in the multiplying of a desirable strain of red clover suitable for Canadian conditions, resulting from years of selection by the staff of the Division of Forage Plants.

Experimental work with turf grasses has attracted a great deal of attention, and there have been numerous requests for seed, vegetable cuttings and information on the general care of turf grass. Some twenty tons of stolons of the more desirable turf grasses were distributed to various organizations desiring them.

An exceedingly useful series of tables for increasing the speed and accuracy of the various computations incidental to the working out of comparative test data was published during the year as Bulletin No. 97, new series, "Experimental Methods 1. Tables for Computing Yields of Forage Crops".

Work towards the improvement of range lands is being carried on at the Dominion Range Experiment Station at Manyberries, Alta., and in co-operation with ranchers on other range areas throughout Alberta and Saskatchewan. In a study of the native vegetation on the range lands consideration is being given to (*a*) the changes brought about in the vegetative cover by the different systems of grazing being practised, (*b*) plant succession, (*c*) the effect of climatic conditions on plant growth, (*d*) the forage acre value of range lands, (*e*) the effect of frequency and closeness of grazing, (*f*) the palatability of native species, (*g*) poisonous plants, (*h*) the relationship between vegetative species and soil types.

Some promising results have been obtained from experimental work which was carried on in co-operation with the ranchers, in the growing of forage crops on the range areas. A reconnaissance has also been made of the range lands near Kamloops and Nicola, B.C. and on the forest reserve near Coleman, Alta., and arrangements have been made to co-operate with the ranchers in reseeding and other work pertaining to range improvement.

Poultry Division

The seady growth which has characterized the poultry industry in Canada during the past few years was continued in 1928. The increased interest displayed throughout the Dominion, and in foreign countries too, is attributed in a large measure to the recent World's Poultry Congress. As a result of the greater demand for stock the hatching industry is in a flourishing condition. Prices held up very well on the average although the influx of eggs from British Columbia has had a tendency to break the market in Eastern Canada and this feature no doubt will have to be taken into consideration in future all over Canada.

As President of the World's Poultry Science Association (formerly the International Association of Poultry Instructors and Investigators) the Dominion Poultry Husbandman visited the British Isles and a number of continental European countries in the interests of the 1930 World's Poultry Congress. In some of the more distant countries there were abundant evidence that the recent Poultry Congress had served a most useful purpose in making known the advantages and opportunities which are to be found in Canada.

Excellent progress has been made in the breeding work and it is gratifying to be able to report that poultry breeders as a whole in buying breeding stock, are now demanding birds which come from large egg stock in contrast to the tendency in the past to give consideration mainly to numbers of eggs.

In the experimental work large numbers of birds are used wherever possible in order to reduce the factor of experimental error to a minimum. Problems relating to incubation, brooding, rearing, culling, feeding, egg production, breeding and houseing are under investigation. The acquisition during the past year of fresh land on which to raise the young stock has been of great benefit. Steady progress has been made in the scope and standard of the work being conducted at the various branch Farms.

During 1928 this Division conducted thirteen Egg Laying Contests, one or more in each province. The average egg production of the 5,100 birds under trapnest was 174·9, as compared with an average of 122·5 eggs nine years ago when the first contests were held.

Eight hundred and sixty females from the 1928 hatch have been registered and the registration of cockerels is still proceeding.

The work of this Division in the province of Quebec is mainly in connection with Registration and Contests. The French Monthly Report service was continued and the volume of French correspondence was very large.

Exhibits, and killing and plucking demonstrations were staged at the important fairs in Eastern Canada and a number of lectures were given.

Much interesting and valuable work in avian pathology has been carried on in co-operation with the Health of Animals Branch. Practically all the flocks on the Experimental Farms have been tested and culled for bacilliary white diarrhoea infection and the results have been very beneficial.

Division of Chemistry

The Division of Chemistry has endeavoured to render all assistance possible to the farmers, by giving information and advice on agricultural problems requiring chemistry for their elucidation, such for example as soils, fertilizers, manures, feeds, and forages, well waters, etc. That this service is valued and appreciated is evidenced by the fact that farmers in ever increasing numbers are availing themselves of it. In fact it has become one of the largest and most appreciated branches of the Division's work, the correspondents numbering many thousands, scattered throughout the Dominion.

Examinations have been made of two series of soils from Lethbridge, Alta., the one with a view to determining the influence of continued irrigation on the plant food content and physical condition of the soil, the other to ascertain how far, from the standpoint of plant food content, the soil may be affected by the continued growth of sugar beets.

The examination of a series of soil samples from Kapuskasing, northern Ontario has shown that the clay loams of the district are specially rich in lime and potash.

Another investigation which has been in progress is that of a series of soil samples collected by the Cereal Division from nine Experimental Stations with a view to ascertaining how far the composition of wheat and oats may be affected by the character and composition of the soil, the crop being grown under the same conditions in respect to moisture, temperature, sunshine, etc.

The fertilizer investigatory work is conducted mainly on the Experimental and Illustration Stations of Eastern Canada. Some of the points emphasized in the results of the past year are (1) the value of phosphoric acid and lime (ground limestone) for the soils of the Annapolis valley for general farm crops,

(2) the profitable use of a complete fertilizer for the potato crop in both Prince Edward Island and New Brunswick and for the hoed crops generally in the southern and eastern districts of Quebec.

Tests have been carried out with new fertilizing products and results so far show that the synthetic nitrogen compounds—nitrophoska, urea, etc.—are equally effective, per unit of plant food, as nitrate of soda, sulphate of ammonia, etc.

An investigation of the close grazing system of pasturage which has been underway two years marks the first attempt in Canada to obtain scientific data on this subject. The results so far obtained have emphasized the high nutritive value of young grass and have indicated the influence of light on the more frequently cut plots in the "bringing in" of white clover.

The importance of taking into consideration the variety of grass, the presence of clover or other legume, and the stage of growth when the crop is cut has again been emphasized in the work of determining the relative nutritive value of Dyke and Upland hays as grown in the Maritime provinces.

In co-operation with the Poultry Division a study was made of the influence of the following factors on bone formation in chicks: ultra violet rays; sunlight through (*a*) celo-glass, (*b*) vita glass, (*c*) common window glass and (d) open window; radiated mash, cod liver oil and absence of sunlight. The three pens yielding the heaviest bones were ultra violet rays, vita glass and sunlight. The pens from which sunlight was excluded yielded the lightest bones, their weight being only half that of the heaviest bones.

A large and important phase of the work in connection with feeding stuffs is the analysis of several hundred samples sent in each year by farmers for a report as to purity, quality and nutritive value. A further phase includes the examination of commercial feeding stuffs with a view of establishing standards of purity.

Investigations in connection with insecticides and fungicides have been carried forward in close co-operation with the Entomological Branch. Materials have been examined to learn if they meet their guarantee or contain substances injurious to foliage, etc., and chemical assistance has been given to a number of researches.

The samples examined for the Health of Animals Branch in connection with the administration of the Meat and Canned Foods Act included condensed and evaporated milks, milk powders, spices, preservatives, edible oils and fats, sausages, pickled pork and bacon, jams, canned fruits and vegetables, etc.

The examination of well waters from farm homesteads is a prominent feature of the work of this Division and there is reason to believe that this service is effecting an improvement in the farm water supplies throughout the Dominion.

Division of Botany

As in former years there was considerable correspondence relating to the culture of medicinal plants and the propagation of wild rice and other plants suitable for attracting wild ducks and providing food for muskrats.

The Seed Exchange Service of the Botanical Garden was very active during the past year and considerable progress was made in arranging the collection of seeds received from foreign botanical gardens.

An intensive survey of the Cornwallis valley in Nova Scotia revealed the occurrence of 250 species of more or less weedy or poisonous plants, about 50 of which were systematically given ratings as the principal weeds of local orchards. Through phenological observations information was secured on the flowering dates of about 125 species of plants growing about the orchards.

Ecological studies of weed associations were commenced in a small way. In several eastern localities attention was given to the composition of permanent pastures with special reference to their weeds.

During the year particular attention was given to studies of diseases affecting flowering bulbs and as a result of these researches valuable information was made available to Canadian growers. At the request of the Dutch Government an officer of the department spent several months in Holland studying bulb growing and shipping conditions.

Bulletin 104, New Series, "Decay in Balsam Fir", was published during the year and is the first of a series which will deal with the forest pathology. The second of this series, Bulletin 111, New Series, "The Biology of Fomes penicola (SW) Cooke", is now in the hands of the printer and will be issued shortly.

At the Laboratories at Charlottetown, P.E.I., Fredericton, N.B., and Ste. Anne de la Pocatière, P.Q., particular attention has been given to a study of diseases affecting potatoes and also to methods of control. Promising strains and varieties have been recorded which show remarkable resistance to the attacks of late blight. Some very interesting facts have been brought to light in connection with the studies of apple scab which have been carried on at Kentville, N.S., and St. Catharines, Ont.

An isolation greenhouse has been erected at the Dominion Rust Research Laboratory, which will facilitate carefully controlled research work. Among the outstanding achievements at this laboratory during the past year may be mentioned Mr. J. H. Craigie's successful researches proving that the wheat stem rust fungus is heterothallic. The laboratory at Saskatoon is chiefly concerned with the root diseases of cereals and during the summer a province-wide survey was made in co-operation with the provincial plant pathologists. Studies with "Take All" indicate that this disease may finally be controlled by proper rotations. Root rots of wheat are probably the most important plant diseases in Alberta and the problem is being studied at the Edmonton laboratory.

As a result of the research work which has been carried on the laboratory at Summerland, B.C., it is now possible to give definite recommendations for the control of certain physiological diseases in apples, such as corky core, drought spot and die-back. Perennial canker, a new disease which is threatening to dominate all susceptible varieties of apples has received intensive study. At the Vancouver laboratory virus diseases, as occuring in British Columbia, are being studied from the bio-chemical aspect.

The applications for field inspections in 1928 in connection with Seed Potato Certification showed an increase of 11·5 per cent over 1927. There was also a substantial increase in the acreage passed for certification, amounting to 31·9 per cent more than the 1927 acreage. Health certificates covering nearly one and a quarter million bushels of table stock potatoes were issued in the eastern provinces for the fall Cuban trade.

Division of Economic Fibre Production

A cold wet spring with consequent late seeding and unfavourable weather conditions from early in August until well on into October made it impossible to harvest the crops at the right time and considerable difficulty was experienced in the retting of both hemp and flax.

The 1928 acreage of flax for fibre and seed was 3,880 acres of Blue Blossom Dutch and 2,120 acres of Pure Line J.W.S. A number of our growers produced J.W.S. pedigree seed under contract for the Irish market, at a price of $4 per bushel for No. 1 grade, f.o.b. shipping point, as compared with last year's price of $3.60 per bushel. Unfortunately this year's yield of seed will not exceed five bushels per acre, as compared with seven bushels per acre in 1927.

A firm in Scotland, interested in a special process for spinning green flax fibre, has contracted with Canadian growers for approximately 3,000 tons of broken green flax straw at $55 per ton f.o.b. shipping point. To date about 900 tons have been shipped.

Three new flax demonstration mills were installed this year, one in Nova Scotia and two in Quebec. It appears very probable that in the near future sufficient fibre will be produced in the province of Quebec to warrant the establishment of an up-to-date power spinning plant. The home-made linen woven in the province of Quebec is in great demand by American tourists and most of it is manufactured from flax fibre treated in our demonstration mills.

Of the 1,640 acres of hemp grown in Canada in 1928, 1,200 acres were grown at Portage la Prairie, Man., 200 acres at Rhein, Sask., 200 acres at Forest, Ont., and about 40 acres at Huntingdon, P.Q. At this latter point a good stand of hemp was secured, but the crop at Forest, Ont., was badly checked by adverse weather conditions. At Portage la Prairie and Rhein, Sask., the height of the crop ranged from 8 to 10 feet, but considerable difficulty was experienced in getting the straw properly retted owing to lack of moisture, and early frost.

Throughout the year there has been a steady demand for hemp fibre with prices ranging from 11½ to 12 cents for line and 7 to 8 cents for grade 1 tow. It appears likely that prices will advance.

Retting conditions were so unfavourable in Manitoba and Saskatchewan that the Department loaned two hemp softeners to the Manitoba Cordage Company, Portage la Prairie and two International hemp breakers to the Western Hemp Products, Ltd., Rhein, Sask.

Two hemp scutching machines were tested at Ottawa, both of which offer a good deal of promise.

Division of Agricultural Bacteriology

The work of this Division may be divided into two kinds, routine and extension, and research. The former consists in providing assistance to farmers and others through the analysis of samples which call for bacteriological examination. The 193 samples received for analysis and reported upon during the year included farm well waters, milk and other dairy products, bread, honey and other food products, legume inoculants, foulbrood specimens, silage, and others of an agricultural nature.

A question that is of great interest to milk producers and one about which there is considerable difference of opinion is that concerning the ability of the milking machine to produce clean milk of low bacterial content, comparable with the product of good hand milking. The Division has had this matter under investigation for the past three years and the findings may be very briefly summarized by stating that the milking machine treated properly, produces clean milk of equal sanitary quality to that obtained by the best hand milking.

With the object of determining to what extent the practice of seed inoculation is successful under practical conditions the Division for the past five years has been conducting co-operative tests with farmers in every province, through the free distribution of nitro-cultures for the inoculation of legume seed. The percentage of total favourable reports ranged from 82 per cent with alfalfa to 65 per cent in the case of field peas.

A considerable amount of work has been done in the investigation of the problem of honey fermentation which is a source of considerable financial loss to beekeepers. Investigations of fermented honey from different sources have shown yeast to be in all cases the agents responsible for the spoilage. Thirteen different yeasts, capable of fermenting honey have been found and isolated, some of which proved to be identical with those found in fermented honey samples.

In continuing the studies on the physiology and cultural characteristics of *Bacillus larvæ*, the cause of American foulbrood of bees, the discovery was made of a more satisfactory medium for the cultivation and recognition of this organism. This new medium not only gives a good growth of *Bacillus larvæ*, but also permits as far as yet determined, of a positive identification of the organism through biochemical tests.

The infectious disease of bee larvæ known as European foulbrood has been commonly regarded, particularly in America, as being caused by an organism known as *Bacillus pluton*. However, in the course of investigations which have been conducted by this Division it has been found that *B. alvei* may give rise under certain conditions to coccoid forms which have an appearance similar to what has been hitherto called *B. pluton* and suggesting a possible primary role to *B. alvei* in this disease.

Tobacco Division

Wet cold weather during March, April and May delayed seeding operations in the tobacco districts of Ontario and Quebec and the plants were slow in growing. There was a very noticeable improvement in seed bed management in the Quebec districts. Cutworms in Ontario and flea beetles and wireworms in British Columbia gave considerable trouble and much replanting was necessary. In Quebec both harvesting and curing were delayed by the excessive rainfall, but in Ontario and British Columbia harvesting conditions were excellent. Frost destroyed from 5 to 8 per cent of the total production in Ontario. On the whole the crop was about average in quality. The flue-cured crop was rapidly sold at an average price of 31 cents per pound. The dark-fired crop is considered to be the best yet produced in Canada, many favourable reports having been received from buyers in the United Kingdom. Burley and dark air-cured tobaccos did not find a ready market and prices were low due largely to over-production. Quebec cigar leaf averaged 11 cents per pound as compared with 19 cents in 1927. In British Columbia production was curtailed although a considerable development took place in the Sumas district in the Lower Fraser Valley.

Further expansion in the tobacco experimental work took place in 1928. The area under tobacco at the Central Experimental Farm was increased and a new air-curing barn was built.

In New Brunswick demonstrational variety tests were carried out in the Grand Lake and Hartland areas as well as at the Fredericton Experimental Station.

The outstanding development in the province of Quebec was the establishment and organization of the new Experimental Station at L'Assomption, chiefly to serve the tobacco producer in that region. For the last three years our efforts in the northern tobacco district of Quebec have been directed towards educating the growers in the production of vigorous, healthy seedlings and in the use of chemical fertilizers, advocating a reduction in the number of varieties, and the use of proper methods of topping. The results have been most gratifying.

At Summerland, B.C., a new flue-curing kiln and an air-curing barn have been built and the work was extended to include preliminary fertilizer studies, a duty of water experiment, studies in the drop leaf disease and tests with flue-cured tobacco. The tobacco area at Agassiz was enlarged and additional varieties were tested.

The work at Farnham, P.Q., Harrow, Ont., and Morden, Man., was largely a continuation of experiments initiated in former years.

In addition to the numerous inspectional trips which the staff of the Tobacco Division made throughout the various tobacco districts many meetings were held during the winter throughout southwestern Ontario in co-operation

with the Ontario Department of Agriculture. At these meetings farm grading was demonstrated, the various cultural operations were discussed, and particular emphasis was laid on the production of high quality tobacco.

With the co-operation of certain producers and packers an exhibit of various types and grades of Canadian raw leaf was shown at the British Industries Fair in London, England. An intensive survey was also made of the possibilities for further expansion of the Canadian export trade with the United Kingdom.

Bee Division

Although winter losses were comparatively light the season of 1928 was unfavourable for honey production, and the crop was somewhat below that of 1927. Weather conditions at Ottawa were particularly unfavourable and not only reduced the honey crop to more than fifty per cent below normal, but also interfered with the experimental work.

An investigation to determine the value of honey bees in cross pollination has been under way for the past six years, and some very interesting results have been obtained.

The respective merits of the Carniolan and Italian races of bees have been studied for the past five years, the results being decidedly in favour of the Italians, which not only led in honey production but also were less prone to swarm than were the Carniolans.

For the purpose of determining their comparative values as brood chambers experiments have been conducted for the past four years with (1) ten frame Langstroth hives, (2) ten frame Jumbo hives, (3) eleven frame Modified Dadant hives. The average production of honey over a four-year period is in favour of the ten frame Langstroth hives, which with a shallow super as part of the brood chamber are also the easiest to manipulate.

A method has long been sought whereby surplus queens could be successfully carried through the winter for use in the spring. It is satisfactory to report that a successful method has now been discovered.

Substantial progress has been made towards the establishment of grades and grading regulations for all honey intended for export. This work has involved the collection, classification, and grading of numerous samples of honey from different parts of Canada and also from the European market.

Research work in connection with honey fermentation is being carried on in co-operation with the Division of Bacteriology. Honey storage is another problem under investigation and the results to date indicate that extracted honey should be stored in cool dry places in order to retard fermentation.

Division of Illustration Stations

The one hundred and eighty-six Illustration Stations operated throughout the Dominion during the past year have rendered very valuable service to farmers situated in districts remote from the Experimental Farms, by demonstrating in a practical way the benefits to be derived from the adoption of the best farming practices, in stimulating greater and more economic production and rendering all possible assistance towards the improvement of the standard of farm live stock.

Well organized field days and meetings served as a means of bringing the work to the attention of farmers in the surrounding districts.

Most encouraging results are now in evidence as the result of the work of this Division in demonstrating and stimulating the growing of alfalfa and clover in Central British Columbia.

Competitions are organized with the object of introducing crops into districts where they had not been grown previously or to stimulate production of a particular crop. The turnip growing competition conducted in connection with the

Illustrations in New Brunswick, Nova Scotia and Quebec is an example. These competitions have a distinct value as is evidenced by the fact that at Petersville, N.B., as a result of this competition, the turnip acreage was increased fourfold. The yields were much higher than formerly obtained and finally in a year of low price levels for farm produce the farmers shipped turnips to the Boston market.

Demonstrations were conducted in the Maritime Provinces which showed that soils low in fertility can be restored to profitable production by the use of limited quantities of chemical fertilizers, in combination with barnyard manure.

An important phase of the work of this Division is that of live stock improvement. In the Eastern provinces, Manitoba, and parts of Alberta and British Columbia, particular attention is being given to the building up of the dairy herds on the Illustration Stations. The majority of the operators are now using pure-bred bulls.

Attention is also being given to the development of typy flocks of sheep and hogs. The policy of selling high class breeding stock to farmers is having a decided influence towards improving the class of live stock kept in the surrounding districts.

The importance of using suitable varieties of grain was demonstrated on several of the Illustration Stations during the past year. In some of the northerly districts in Saskatchewan where frost damage was severe Garnet wheat was demonstrated to be superior to Marquis both in yield and grade. In northern Ontario and northern Quebec where an early maturing variety of oat is necessary Alaska has proven a very desirable variety. Thousands of bushels of surplus seed grain and seed potatoes were sold by the Illustration Station operators during the past year.

There has been a notable improvement in the housing, general management, and the quality of the poultry kept on the Illustration Stations. Surplus breeding stock and hatching eggs are sold to farmers in the surrounding districts.

The supplementary value of nitrogenous fertilizer in the form of nitrate of soda and sulphate of ammonia as a practical means of increasing hay and farm crops where the soil is naturally lacking in fertility, was demonstrated on a number of Illustration Stations in the Maritime Provinces.

Division of Extension and Publicity

Among the chief features of the work with which this Division is charged are the following: 1) The preparation and staging of Experimental Farms exhibits. (2) The distribution of Experimental Farms publications at the exhibitions visited. (3) The enlarging of the mailing lists. (4) Sending out information and literature in response to requests received by mail. (5) Supervision and operation of a central bureau of lantern slides for the Dominion Experimental Farms System; sending slides to those making application for them and making up special sets for the various divisions and branch Farms. (6) The making of graphs, charts, legends, and publicity signs for use at the Central and branch Farms. (7) Editing and distributing short seasonal and regional articles to the press throughout Canada. (8) Securing, editing and preparing for printing the articles for "Seasonable Hints." (9) Editing and preparing for printing all Experimental Farms publications including reprints and revisions. (10) Preparation and distribution of small collections of grains, grasses, photographs, etc., for use in teaching agriculture in educational institutions throughout Canada. (11) Delivering addresses concerning the work of the Dominion Experimental Farms and attending to many other lines of extension and publicity work as they present themselves.

The very strong demand for our agricultural educational exhibits during the past year was met to the fullest extent possible with the exhibits and staff available.

Considerably more than 100 sets of lantern slides were sent out during the year and it is becoming more and more noticeable that many high schools and collegiate institutes send in regularly for several sets of these slides each year for use in teaching their classes in agriculture.

Our press articles enjoy a very wide use in Canada and are issued both in French and English. Henceforth it is proposed to issue "Seasonable Hints" quarterly instead of three times a year. As an evidence of its ever increasing popularity it may be stated that it now has an edition of nearly half a million copies per issue. This publication has been the subject of very many favourable comments.

Between seventy and eighty Experimental Farms publications were edited and prepared for printing during the past year, and a very considerable amount of work was also done in the multigraph room. The chief of the Division addressed a number of service clubs, agricultural and horticultural organizations.

Other Activities

There are of course many other activities at the Central Experimental Farm which are not included in the reports of the work of the various divisions. The draughting room is particularly worthy of mention. Here are prepared the plans and specifications of new buildings to be erected on the various Experimental Farms and Stations, as well as blue-prints and sets of stock plans of all sizes and types of farm buildings for distribution to applicants.

During the past year twenty-nine sets of drawings were prepared, including both sketches and complete working drawings, and 1,268 blue-prints were distributed. There has been a very substantial increase in the number of enquiries received from farmers, relating to problems connected with the construction and alteration of farm buildings of all kinds.

Further cost data was collected on farm buildings of various sizes and types. Each increase in data tends to improve future estimating as the averages are then based on a larger total number of buildings.

Preliminary work has been done towards the revision of branch Farm maps.

The Architect in charge has been appointed a member of the Committee on Research of the Royal Architectural Institute of Canada.

BRANCH FARMS AND STATIONS

Experimental Station, Charlottetown, P.E.I.

In the season of 1928 all vegetation was early, germination was good, and ripening and harvesting conditions were satisfactory.

The herd of pure-bred Ayrshire cattle at this Station is now rapidly building up and some very creditable milk records have been made. Ten of the eleven cows that freshened in 1927 have qualified in R.O.P. Twenty steers were fed and returned a total profit of $734.55 over cost of feed. There is also a small herd of Yorkshire swine from which breeding stock is sold to farmers.

All field crops did well with the exception of clover which was badly winter killed.

Some of the cultural experiments have been under way since 1916 and results show that cereals and roots do best, under average conditions, when they are covered fairly deeply and that liberal seedings of clover and timothy ensure heavier hay crops.

Variety tests of cereals and forage crops were continued and much valuable information has been obtained from the fertilizer tests.

In the poultry plant there has been a marked improvement not only in egg production but also in the size of the eggs. Thirty two birds qualified for registration, in the Egg Laying Contest.

The bees came through the winter without loss but the total yield of honey was below the average. There are now 29 colonies in the apiary.

Good progress has been made in the work on the Illustration Stations which are now becoming centres for registered grain, certified seed potatoes, and improved live stock and poultry.

The staff acted as judges at many agricultural fairs and also staged exhibits at the Charlottetown Exhibition and Georgetown Fair which attracted considerable attention.

Experimental Fox Ranch, Summerside, P.E.I.

Some interesting studies have been made of factors controlling the production of the black colour in silver foxes. Fox breeders have generally contended that the fur has acquired a brown shade because it has gone past prime, but the observations in the Experimental Fox Ranch would indicate that it is due to the lack of the pigment. In the experimental work foxes which have been fed vegetables in step with the season, the milk modified by the addition of beef tripe, and small quantities of fat fed during the summer months have developed a very favourable amount of black pigment and the fur has maintained an excellent black colour long after the hide has been prime.

Experimental work is also being carried on to determine the effect of the brown shade of the fur on the breeding quality of female silver foxes, but as yet only tentative conclusions have been deduced.

Very interesting results have been obtained in the in-breeding experimental work which will be continued in order to ascertain to what extent intense in-breeding affects the breeding qualities of the foxes and also its influence on the fur and other inherent qualities of the foxes.

Ten special pens have been constructed to facilitate the study of the control of parasitic infestation by the use of impervious flooring. The efficacy of systematically sterilizing pens with a firegun at intervals of three weeks throughout the season is also being tested, while other pens have been treated with sterilizing agents. It is yet too early to draw definite conclusions from these experiments.

The effect of different anthelminties upon the intestinal tract was studied with the foxes that were pelted during the year. While the critical evidence obtained was not very pronounced, sufficient was obtained on which to base recommendations to fox breeders.

Experimental Farm, Nappan, N.S.

Crop yields in 1928 were slightly lower than the average of the past six-year period. More precipitation during the ripening period would have been beneficial to the cereal crops. Oats were rather light per measured bushel.

An experiment in the grading up of a dairy herd by the use of pure bred sires of known ancestry has been carried on at this Farm for a number of years with very satisfactory results. The foundation cows from which the present herds of Ayrshires and Holsteins were developed were common grades with an average production of 3,895 pounds of milk as two-year-olds and only 5,107·5 pounds as six-year olds. In the matter of milk production and profit over feed cost the progeny have shown a marked improvement over their dams. In 1928 the average for the Ayrshire herd was 7,718 pounds of milk testing 4·2 per cent butter fat, while the Holsteins averaged 9,080 pounds of milk testing 3·7 per cent butter fat. A full account of this experiment will be published shortly in bulletin form.

The pure-bred Guernsey herd is headed by the bull "Blanche's Raider of Nappan" a son of "King's Blanche of Hillside" whose record was 12,230 pounds of milk testing 6·23 and yielding 752 pounds of fat. It includes a number of young females that promise well in production, and all the progeny show a marked improvement over the foundation cows, in type and conformation. Still further improvement is expected as a result of breeding some of the daughters of Blanche's Raider to his son the junior herd sire "Canadian Raider".

From data collected over a period of years it is evident that home grown feeds such as are necessary for the economical raising of good live stock can be produced under good average conditions and with proper cultivation, as cheaply if not at less cost, than they can be purchased on an average market.

With a view of improving the yield and quality of marsh hay experiments are being conducted on some 65 acres of marsh land. Yields as high as 2¾ tons per acre were obtained in 1928. The hay was of excellent quality being largely made up of timothy and clover with some couch grass scattered throughout.

Experimental Station, Kentville, N.S.

The dry summer favoured the earlier maturity and better colouring of late varieties of apples, but it also resulted in reduced yields of all crops, particularly roots.

Live stock at this Station consists of a herd of dual-purpose Shorthorn cattle and a herd of Yorkshire swine. Ten cows qualified in R.O.P. with an average of 6,507·7 pounds of milk and 308·4 pounds of butter. There was a very keen demand for breeding stock.

Crop rotation, cultural and fertilizer experiments were continued, and the indications are that the three and four year rotations are likely to be proven the most suitable for this district.

Particular attention is being given to the control of orchard insects and apple scab. In spite of the dry season fruit trees made good average growth. As regards plums considerable thinning is necessary for the best development of a crop of high grade fruit. Cherries are an unsatisfactory crop due to the ravages of birds.

Strawberries were a poor crop and most bush fruits gave light yields. Onions sown in the greenhouse and transplanted to the field in May gave a yield of 25 tons of matured bulbs per acre. The cabbage maggot was successfully controlled by the use of tar paper discs.

Rod row tests of varieties and strains of oats, barley and wheat were conducted. The following varieties gave the largest yields in the field plots: No. 80 barley, Victory oats, and Huron wheat.

Results obtained in the experiment in pasture improvement indicate the necessity of lime and phosphorus in establishing satisfactory grazing areas.

The results of tests which have been under way since 1924 to determine the value of Malagash salt in increasing crop yields indicate that but little benefit has resulted from the use of this material. Very satisfactory results have been obtained from the use of phosphate fertilizers and lime as a surface dressing to improve the quality and increase the quantity of the herbage in pasture lands.

In the Egg Laying Contest thirty-four birds qualified for registration. Steady improvement is being made in the quality of the stock in the poultry plant.

An investigation is being carried on in co-operation with the Entomological Branch to determine the part played by bees in pollinizing fruit.

Flax grew fairly well but hemp, on account of the dry season, made very poor growth.

Progress has been made in the development of pure-bred herds and flocks on the Illustration Stations which are under the supervision of the superintendent.

EXPERIMENTAL STATION, FREDERICTON, N.B.

There was severe winter killing on hay and pasture land and in strawberry plantations, but the orchard came through in good condition. Crops sown during the dry period of the first three weeks in May germinated well. Then followed two weeks of wet weather and seed sown on clay land during that period germinated poorly. Pastures were good the entire season but the rains made it difficult to harvest grain.

An experiment to compare scanty with liberal feeding of low grade dairy heifers has been underway since 1924 and was completed this year. The results indicate that it is not advisable to feed growing stock of nondescript breeding too liberally. In other words good feeding should go hand in hand with good breeding.

A flock of pure-bred Shropshire sheep is maintained at this Station, and the superiority of the 1928 lamb crop from ewes which had been fed iodine salt during pregnancy was quite apparent.

This year preliminary work was undertaken towards the development of a system of Advanced Registry for swine. The data secured strongly supports the theory that breeding has a very direct economic bearing on swine feeding.

Special attention is given to problems relating to commercial fertilizers in order to meet the constant demand for information.

Some promising results have been obtained from the first year's work in an experiment to determine the effect of close grazing, alternate pasturing, and heavy applications of nitrogenous fertilizers would have on the stock carrying capacity of an average New Brunswick pasture.

The average production in the Egg Laying Contest this year was 186·4 eggs with 194·7 points, the highest ever obtained at this Station. Moreover a new Canadian record was made for Barred Rocks by the hen Lancaster F. 7 with 330 eggs and 361·7 points in fifty-two weeks, and 332 eggs with 364·2 points in 365 days from the date of the first egg. The feeding and hatching experiments have yielded much useful information.

Satisfactory progress has been made in the corn breeding work. A hybrid resulting from a cross between Twitchell's Pride and Wisconsin No. 7 has for the past four years given practically the same yield as Wisconsin No. 7 and is decidedly earlier. Another promising hybrid has been obtained by crossing Twitchell's Pride and Howes Alberta Flint.

Results obtained in the orchard spraying experiments which have been carried on in co-operation with the Entomological Branch suggest a possible modification of the regular New Brunswick spray calendar to include the use of Bordeaux mixture before the blossoms open and a lime sulphur aluminum sulphate mixture for the after blossom spray. In the nursery efforts are being directed towards obtaining a more desirable variety of winter apple for New Brunswick conditions.

Small areas of three varieties of tobacco were grown at the Station and also in Queens and Carleton counties to determine the adaptability of this crop to different parts of the province. Splendid results were obtained in Queens county.

EXPERIMENTAL STATION, STE. ANNE DE LA POCATIERE, P.Q.

The spring season was rather wet and cold and seeding was not commenced until May 11. It was not completed in the district until the last week of June. The hay crop was above average, but grain was light and late in maturing. Field roots and corn were below average but the fruit and vegetable crops were very good.

Percheron horse breeding in this district has been given a decided impetus through the importation of the splendid stallion " Chacal " who has served many

mares in the district. Six colts were reared at the Station. The dairy herd of Ayrshires is fully accredited and has passed its second test for contagious abortion without a single reactor. Experiments have shown that in this district corn silage is not as economical a feed for dairy cattle as roots, peas, and oat hay. The use of high quality rams and good care have resulted in a marked improvement in the flock of registered Leicester sheep. Some interesting swine feeding experiments were conducted and breeding stock was sold to farmers.

Field husbandry work included crop rotation, cultural drainage and fertilizer experiments, studies in the renovation of pasture and the production of high grade seed.

Further tests were made to determine the value of fertilizers applied singly and in combination for the growing of roots, grain and hay crops. Sugar beets grown at this Station has been satisfactory as to yield, purity of juice and sugar content.

A fair crop of apples was harvested in spite of injury to the trees caused by the exceptionally heavy snowfall. The plum and cherry crops were rather heavy. Spraying, mulching and thinning experiments were continued and a new project in the fertilization of apple trees was initiated.

Steady progress has been made in the poultry work and thirty birds qualified in the Egg Laying Contest for registration. It is satisfactory to report that the average production of the 20 best pullets at this Station has doubled in the last six years.

In addition to conducting the usual variety tests of cereals the officers of this Station co-operate with the Quebec Provincial Seed Board in their efforts to foster the use of better seed grain.

Variety tests of corn, sunflowers, roots, etc. were continued with the object of determining the most suitable varieties for this district.

Experimental work with flax was continued and the scutching plant was again operated for the benefit of the farmers in the district.

A very successful year was experienced in the apiary. A four-year trial to determine the most advantageous size of hive to use has resulted in favour of the 10-frame standard Langstroth.

On the twenty-two Illustration Stations supervised from this Station particular attention is being given to live stock and poultry improvement.

Experimental Station, Cap Rouge, P.Q.

The growing season was somewhat warmer, with more sunshine and a much heavier precipitation than the average of the last sixteen years.

From sixty-five to ninety pure-bred French-Canadian horses are kept at the St. Joachim Horse Farm which is under the direction of the Superintendent of the Cap Rouge Experimental Station. Experiments in breeding, feeding, housing and management are carried on.

At Cap Rouge there is a very fine and fully accredited herd of pure-bred French-Canadian cattle and a herd of pure-bred Yorkshire swine. Much useful experimental work has been done.

Meadow and pasture improvement is one of the lines of field husbandry work under way. Crop rotation and soil management experiments are also being carried on.

Variety and cultural tests with fruits, vegetables and ornamental plants and flowers have been conducted on a fairly extensive scale, and have yielded much valuable information.

In the work with cereals major attention has been given to oats, this being the most important cereal in central Quebec.

One of the main fertilizer experiments being carried on is to determine the effect of basic slag on the yield and on the composition of the herbage on the

pastures which form the bulk of the tillable land in the district served by this Station. Much of the tillable land in Eastern Canada is in need of lime and an experiment is under way to determine the relative value of ground limestone and burnt lime.

Forage crops under test include a large number of varieties and strains of timothy, red clover, alfalfa, corn, sunflowers, mangels and turnips. It has been found that red clover seed from southern European countries is practically of no use under northern conditions.

Breeding, feeding, housing and management experiments are being conducted in the poultry plant with a flock of Barred Plymouth Rocks. Particular attention is being given to the selection of breeding stock for heavy egg production.

Experimental Station, Lennoxville, P.Q.

April was a cold and wet month and seeding was not commenced until May 8. Very little clover survived the winter. The hay crop was of poor quality and the yield of grain was below the average. Corn and roots did fairly well.

Only two breeds of cattle are now kept at this Station, namely, Jerseys and Dual Purpose Shorthorns. Both herds are under the supervision of the Health of Animals Branch, in an effort to determine causes of infectious genital disease and to eradicate this disease. As in former years various feeding experiments were conducted with groups of steers totalling ninety-five head. The cross-breeding of Shropshire and Cheviot rams with Oxford Down ewes has been carried on to determine the market quality of the lambs. The results are in favour of the Cheviot cross. Feeding experiments and cost of production studies were carried on with the herd of Yorkshire swine.

Field Husbandry work consisted of various crop rotations, cultural experiments and work with fertilizers, manure and lime. Attention is also being given to the problem of the renovation of old pasture lands.

In addition to the usual variety tests of forage crops, breeding work is being carried on with a variety each of mangels and swede turnips. Further variety tests of mangels, swede turnips and ensilage corn were conducted in co-operation with the Quebec Provincial Seed Board.

A larger number of rod row tests of cereals were conducted than in former years, and the breeding work was continued. Cereal projects were also carried on in co-operation with the Quebec Provincial Seed Board and the United States Department of Agriculture.

Variety and cultural tests with the principal vegetables, small fruits, apples, plums and pear seedlings were continued, and tests for hardiness and suitability were conducted with ornamental shrubs, herbaceous perennials and annual flowers. Some breeding work was done with several varieties of vegetables. The production of uniform hardy root stock received increased attention, and a number of hardy varieties of apples of good quality originated by the Horticultural Division at Ottawa were propagated by root grafting on hardy seedling stock. The co-operative experiments in commercial orchards at Abbotsford and Chateauguay Basin, P.Q. were continued.

Experiments conducted with hemp for fibre indicate that the soil and climatic conditions in the Eastern Townships are as a rule favourable for this crop.

While the apiary is maintained primarily for demonstration purposes some experimental work is carried on, such as tests of different sizes of hives, studies of methods of swarm control, methods of wintering and queen rearing.

Excellent results were obtained in the poultry plant, and the pen entered by this Station in the sixth Quebec Western Egg Laying Contest led the Contest with 2,295·3 points, one of the birds laying 291 eggs with more than 335 points.

Experimental Station, Farnham, P.Q.

On the whole the season of 1928 was less favourable than 1927 for tobacco and most other crops. Although germination was late the tobacco seedlings were better than expected, but a severe hailstorm in July did considerable damage. The tobacco plantations suffered also from an excess of moisture.

Formalin used as a disinfectant in the tobacco seed beds for the control of disease has proved very satisfactory and economical.

A comparison between home mixed fertilizers and a special fertilizer for tobacco showed that the former is not only cheaper but produces a larger yield of tobacco per acre, and of a quality about equal to that produced by the special fertilizer.

Of the eleven varieties of pipe tobacco tested this year the most promising were the Obourg Vincent, Belge 3007, and Little Dutch Ragondorf. Considering the unfavourable season the quality was good and yields varied from 950 to 1,700 pounds per acre.

The land on which cigar binder varieties were tested unfortunately suffered from excessive moisture and consequently the yields and quality of leaf were much poorer than last year's crop. Resistant Havana, Connecticut Havana 142 C3X, and Comstock Spanish 3054 gave the best yields.

In a test of cigar filler types Zimmer Spanish Kendig and Little Dutch Ragondorf were about equal in quality and both of these varieties are much superior to Connecticut Shade Cuban.

Results of a test of drilling versus broadcasting fertilizers for the tobacco crop were in favour of drilling this year.

Different manures have been tested for the tobacco crop and in the matter of yield they rank in the following order; hen manure, horse manure, cow manure, sheep manure, and hog manure. The best quality of leaf was produced with hen and sheep manure. Next in order of merit came horse and cow manure which were about equal, while hog manure produced a poor quality of leaf. Manure and fertilizers in combination and manure alone gave larger yields than did spent hops and yeast. There was very little difference in the quality of the leaf.

Many farmers were visited and were given assistance in their problems, and more than 200 tobacco growers attended the annual field day at the Experimental Station.

Experimental Station, L'Assomption, P.Q.

The Station has been established primarily to serve the tobacco growing industry on the north side of the St. Lawrence river in the province of Quebec, for which purpose it is splendidly located. The property consists of 180 arpents more or less and is situated about half a mile from the centre of the village of L'Assomption. The soil is fairly uniform and is of a sandy loam texture throughout, with good drainage facilities. The farm has a good frontage on the Montreal-Quebec highway, with a side road running the full length of the property between the highway and the railway station. Transportation facilities, both by rail and road are good.

A relatively small amount of experimental work was conducted during the past year, efforts having been directed chiefly towards thoroughly cleaning, preparing and laying out the Farm for experimental work. Plot areas have been defined according to desirable soil characteristics, rotations planned, permanent roads and fences have been established and urgent underdrainage work has been performed. Necessary new buildings have been constructed, consisting of cattle and horse barn, dairy building, implement shed, tobacco curing barn, office, and superintendent's residence, and some of the old buildings have been repaired. A small herd of pure-bred Holstein cattle has been established, and with the

completion of the above work the Station will be ready to carry on a full program of experimental work, covering practically all phases of agriculture, but with particular attention to tobacco investigations.

Experimental Station, La Ferme, P.Q.

The season of 1928 was a remarkably wet one, the precipitation from May to October inclusive amounting to 34·95 inches, which is 14·45 inches above the average for the past eleven years. There were 132 hours less sunshine than the average for the last eight years. The hay crop was very heavy but the other crops were affected by the excessive rainfall.

A breeding stud of registered French-Canadian horses is carried at this Station and three foals were raised this year. Cost studies are also being carried on. As the result of continuous selection and constant attention to feeding there has been a marked improvement in the dairy herd of pure-bred and grade Ayrshires both in general appearance and milk production. The herd is fully accredited. Breeding work is also carried on with a flock of registered Cheviot sheep and a herd of Yorkshire swine.

Experimental results obtained to date indicate the advantages of fertilizers in general. The work on surface drainage has shown that water furrows 12 to 15 inches deep and spaced from one to three rods apart according to the topography of the land are often as satisfactory as expensive ditches. Various crop rotations are also under test.

Sunflowers, corn, roots, annual hays and grass mixtures are included in the variety tests of forage crops.

Variety tests of cereals are carried on in co-operation with the Quebec Provincial Seed Board. Garnet wheat, Alaska oats and O.A.C. No. 21 barley appear to be well suited to this district.

Apple and plum trees wintered well and made a good growth. Variety tests of vegetables, small fruits, flowers and ornamental shrubs were continued.

The flock of Barred Plymouth Rocks has made substantial progress in the matter of egg production, and six birds entered in the Eastern Quebec Egg Laying Contest qualified for registration. More than 2,000 chicks were sold to farmers.

Experimental Station, Kapuskasing, Ont.

Seeding was practically completed by June 7, and with ample precipitation in June and July most crops made good growth. The weather was favourable for haying operations but during the harvest season there was considerable wet weather.

Pure-bred and grade Ayrshire and Shorthorn cattle are kept at this Station. In addition to the feeding trials, a record is kept of cost of rearing and cost of milk production. Experimental work is also carried on with a flock of registered Shropshire sheep and a herd of Yorkshire swine. Surplus stock of a desirable type is sold for breeding purposes.

Experimental results show that the rate of seeding for such crops as sunflowers, corn and a mixture of oats, peas, and vetches may be carried considerably without materially affecting the yields.

Date of seeding experiments have been conducted over a period of five years with beets, carrots, and parsnips, and the results indicate the advisability of planting these vegetables as early in the spring as the condition of the soil will permit. Earlier maturity and larger yields of potatoes have been obtained when the tubers have been sprouted before planting.

Results from tests with red clovers indicate the futility of using southern grown seed. In this district timothy is superior to either meadow fescue or orchard grass. Mangels, swede turnips, fall turnips, and carrots should be seeded as early as possible in the spring.

Experiments are also under way to determine the final effect of applying various fertilizers to the first crop in a four-year rotation of O.P.V.; barley; clover hay; and mixed hay.

In the poultry feeding tests it has been found that clover leaves are just as suitable as sprouted oats as a green feed for winter egg production and there is less labour entailed.

Further improvement has been made in the flock of Barred Plymouth Rocks in the matter of production and size of eggs, through the use of the trap nest.

Judging from the results obtained in the apiary honey production has a promising future in northern Ontario. Much useful work has been accomplished on the eighteen Illustration Stations supervised from this Station.

Experimental Station, Harrow, Ont.

On the whole the season of 1928 was favourable for most crops. Tobacco did quite well, with the exception of that on the lower wet fields which suffered from too much water. Weather conditions in the Fall were very favourable for harvesting and curing tobacco.

Experiments have been conducted with various types of plant beds, including semi-hot, glass covered; semi-hot, celo-glass covered; cold, glass covered; hot, glass covered; hothouse, cold; and semi-hot canvas covered. The semi-hot, glass covered beds proved to be the most economical, and produced plants ready for transplanting on May 26. Steaming the beds for 30 minutes with 100 pounds of boiler pressure is recommended for the production of thrifty seedlings.

The use of fertilizer in conjunction with manure again gave splendid results on burley, black and flue-cured tobaccos. Home-mixed fertilizers were more economical and gave just as good results as commercial ready mixed fertilizers for tobacco.

Of the flue-cured type Warne is considered the best general variety. The best variety of Burley grown on the Station is the Station Standup, while Broadleaf and Standup Resistant are good and grow well on diseased soils. Of the Green River types Greenwood is the leader, followed by Little Hill, neither however have proven to be resistant. Burley and black tobaccos of good quality and colour have been grown in the four and five year rotations. More than 200 pounds of the leading types and varieties of tobacco seed were produced.

Experiments were again conducted to determine the cost of producing beef by winter feeding of home grown feeds, and following the steers with hogs.

Thirteen varieties of wheat under test in rod-row plots were partly winter killed. The variety O.A.C. 104 was the leader, followed by Burkley Rock and Minturki in the order named. Yield and cost of production records are kept for most of the crops grown on the Station.

A number of different varieties of corn, broom corn, sugar beets, and soy beans are under test, but on account of the corn borer infestation at this Station the greater part of the corn breeding work has been transferred to the Central Experimental Farm at Ottawa.

Six varieties of hemp were grown for seed production, but the soil is rather sandy, and results so far are not very encouraging.

Horticultural work included variety tests of early tomatoes, sweet corn, and potatoes, and the production of seed beans and canning peas.

Experimental Station, Morden, Man.

During the spring and early summer there was considerable precipitation and cereal crops made a heavy growth. The yield and quality of wheat and barley were about up to the average but the straw was badly lodged and this

increased the cost of handling the crops. Prices also were lower. The ornamental areas made a splendid showing but tree and cane fruits suffered considerable root injury.

The herd of Ayrshire cattle is fully accredited and some very creditable records have been made under the Record of Performance test. Bulls from this herd are being used to advantage in many local farming communities to grade up herds. Breeding work is carried on with a flock of pure-bred Hampshire sheep and a nice crop of lambs was raised this year.

Oats and corn both gave very satisfactory yields, and the legume hay crops were excellent. The value of crop rotations is becoming more and more pronounced with the increase in noxious weeds in the district and the lessening of fibre in the soil.

Horticulture is the major line of work at this Station. Of the 350 trees which fruited for the first time in the 1916 apple seedling orchard 41 have been selected to be propagated for further test. Controlled breeding of apples, plums, cherries and strawberries was carried on in the greenhouse and orchard. Considerable propagation was also done by root grafting, top working and culling and many other branch Farms and Stations were supplied with nursery stock. The horticultural work carried on in co-operation with selected private growers is of distinct value in demonstrating cultural methods and the adaptability of varieties. A new plantation of small fruits has been established to provide for more extensive variety tests and breeding work.

Vegetable seed production was continued and over a ton of seed of Banting sweet corn was sold to wholesale seed houses for distribution on the prairies.

The extensive annual and herbaceous perennial plantings are a source of pleasure and instruction to the many thousands of visitors. In the rose garden, in addition to the breeding work, a study is being made of methods of disease and insect control. The collection of shelter and ornamental material in the arboretum is now so extensive that larger accommodation is being provided.

Variety tests of cereals were conducted in rod rows. Data are also being acquired on disease resistance.

In the work with forage crops attention is directed chiefly towards the production of improved strains of fodder corn by inbreeding and hybridizing.

Rhode Island Reds are the only breed of poultry kept and the records show consistent and substantial progress in production through careful selection and mating of breeding stock. Excellent results were obtained in incubation and there is a heavy demand for breeding stock, hatching eggs and day old chicks.

The experimental work in the apiary is attracting widespread interest as is evidenced by the numerous visits of beekeepers from distant points.

Tests have indicated that in sheltered areas on the loam soil of this Station commercial tobacco growing is an attractive venture.

Experimental Farm, Brandon, Man.

There was a very heavy rainfall in June and early July but the autumn was very dry. Rust damage was less than usual, and the hay and grain crops were above average in yield. However, frosts in August lowered the grades of grain and farmers suffered heavy financial losses.

The herd of dual purpose Shorthorn cattle at this Farm is fully accredited and bull calves are sold to farmers for breeding purposes. Feeding trials were conducted during the past year to determine the relative values of different silages. The breeding herd of swine is made up of pure-bred Yorkshires. Preliminary work has been done towards the establishment of a system of Advanced

Registry for swine. Pure-bred Oxford sheep and grades of the same breeding are kept. Special attention has been given to the control of internal parasites and to the rearing of lambs for the early market.

Field husbandry work consists chiefly of crop rotation and cultural experiments. Records are also kept of the cost of production of different crops.

Selection and crossing work is being conducted on a fairly large scale in an attempt to produce rust resistant varieties of wheat of satisfactory quality, yield and strength of straw. About 400 hybrid strains are now in the fifth generation and appear to be satisfactory in agronomic characters; as many of these as can be handled will be sent to the Cereal Division at Ottawa for a milling and baking test.

In addition to the variety tests of forage crops preliminary plant breeding studies are being made of all forage crops of importance to Manitoba, particularly corn and sweet clover. Experiments in rates, dates and depths of seeding alfalfa and sweet clover have also been conducted.

Of the eleven varieties of potatoes tested for yield, the Early Bovee gave the best returns. Macdonald and Ruby are two promising varieties of rhubarb. The Sunshine, a new garden variety is useful in supplying good table corn in the season between the earliest varieties and Golden Bantam.

Breeding operations with the flock of pure-bred Barred Plymouth Rocks have for their main objective increase in production and size of eggs. Feeding experiments were also conducted.

Co-operative trials of varieties of wheat, barley and alfalfa have been conducted under the joint auspices of the Field Husbandry Department of the Manitoba Agricultural College and the Dominion Experimental Farms at Brandon, and Morden to determine the varieties best suited to certain districts. This work has been further extended through the co-operation of the Manitoba Wheat Pool.

Experimental Farm, Indian Head, Sask.

Dry weather during May caused unsatisfactory germination and an uneven ripening of the grain crops. Frosts during the week ending August 25 decreased the yields, lowered grades and caused serious financial loss to farmers. Excellent yields of good quality grain were obtained on the Experimental Farm.

The breeding and development of draught horses is featured at this Farm. An excellent stud of pure-bred Clydesdales is maintained. There is also a herd of pure-bred Shorthorn cattle which is being built up along beef lines. A valuable acquisition is the new herd sire "Browndale Anchor." A dairy herd of Ayrshires is also being built up. Breeding and experimental work is also carried on with a small flock of Shropshire sheep and a herd of Yorkshire swine, and breeding stock is sold to farmers.

In addition to the four-crop rotations under test there is also an extensive series of cultural experiments under way, designed to obtain information on summer-fallow; stubble treatments; breaking, rates, dates and methods of seed-manures and fertilizers.

Marked progress has been made in the production of Elite seed stocks of wheat, oats and barley. In the tests of varieties of cereals the number of replications of each variety or strain under test was increased. Much useful work has also been done in co-operation with the Canadian Seed Growers' Association, the Dominion Seed Branch, and the Saskatchewan Co-operative Wheat Producers, Ltd.

Yields of alfalfa varieties were above average in spite of winter injury. Plots of red clover sown with Italian seed were completely winter killed. Corn grew well but was considerably damaged by frost in August and very little seed was obtained. The intermediate type of mangel again proved to be the heaviest yielder. The three varieties of sugar beets under test all showed a high sugar content.

Work with fruits, flowers, vegetables, and ornamental trees and shrubs is directed chiefly towards the study of such problems as production, propagation, winter killing, plant breeding and selection, disease and insect control, and storage. The new greenhouse is now in full use, and considerable planting has been done in the new arboretum.

Flock management and selection for type and egg production are the principal lines of poultry work. The Saskatchewan Egg Laying Contest which is conducted at this Farm continues to attract great interest amongst poultry breeders.

Experimental Station, Rosthern, Sask.

The dry spring season was responsible for delayed and uneven germination of seed and favoured the development of weeds. Late varieties of wheat and all varieties that were down late were injured by early frosts.

The herd of Holstein-Friesian dairy cattle at this Station has been accredited since 1920 and has successfully passed the test for contagious abortion. The flock of grade Leicester sheep is gradually being replaced by pure-bred Suffolks. The work with swine is directed chiefly towards developing a system of Advanced Registry.

Seven different crop rotations are being carried on under field conditions. The cultural experiments which occupy an area of 76 acres deal with ploughing, depth and time of seeding, manuring, summer-fallow and summer-fallow substitutes.

Variety and cultural tests of vegetables were continued and greater attention was given to the testing of varieties of annual flowers. The crossing of standard varieties of apples on the hardy crabs grown at the Station, was continued by the introduction of pollen from apple districts in Manitoba, British Columbia and Ontario.

Co-operation cereal variety tests are being conducted with the object of determining the most suitable varieties for each district in northeastern Saskatchewan. In districts that are subject to early fall frosts such varieties as Garnet, Reward, Ruby and Preston have shown up to advantage over Marquis and Red Fife.

Oats cut when beginning to turn is the most satisfactory annual hay yet tried. For succulent feeds for dairy cattle corn and sunflower ensilage are less expensive to grow than turnips and mangels.

The breeding pens of Barred Plymouth Rocks are made up of hens with records of 200 eggs or more in their pullet year, the eggs each weighing 2 ounces or more.

Fifty-one colonies of bees are located in the main apiary and another eight colonies are in an out-apiary some five miles distant from the Experimental Station.

Experimental Station, Scott, Sask.

May was an unusually dry month, but precipitation during the summer months was almost ideal for grain production. Unfortunately, the grain crops with the exception of Garnet and Reward wheat were severely damaged by frosts in August.

Steady improvement is being made in the herd of Shorthorn cattle at this Station and there is a ready sale for bull calves. Sweet clover, sunflower silage, western rye grass and prairie wool were the roughages used in the steer feeding tests, and in gains produced they ranked in the order named. The average wool clip from Shropshire, Cheviot and Rambouillet sheep for the past season was 7·8 pounds, 6·8 pounds and 9·7 pounds respectively. Preliminary work was undertaken towards the establishment of a system of advanced registry for swine.

Spring ploughing has given larger yields than fall ploughing and results do not favour deep ploughing for summer-fallow. Promising indications of increased yields of wheat have been obtained by the use of superphosphate. Results from the crop rotation experiments show that these containing hay crops maintain profits and produce clean crops of grain.

For the first time in seven years fall sown hardy vegetables did not produce a satisfactory crop. The growth of tender long seasoned vegetables was stopped by late August frosts. Raspberries and black currants yielded heavily and there was a splendid display of annuals and perennials in the flower border.

Garnet is the leading variety of wheat tested, followed closely by Reward and Marquis in the order named. Of the barleys under test Haanchen leads the two-rowed varieties, but Trebi, a six-rowed sort, shows a commanding lead over all varieties. Banner is the leader among the standard varieties of oats. Co-operative work in rust, smut, root rot and environmental studies of wheat are being carried on as well as variety tests. Some breeding work is also being done.

Sunflowers have proven vastly superior to corn as a silage crop in this area. Artic is the only dependable variety of sweet clover, and of the hay crops tested oats have given the best results. A comprehensive series of tests with western rye grass is under way.

In the apiary attention is being directed chiefly towards finding a suitable method of outside wintering.

Experimental Station, Swift Current, Sask.

The spring season was extremely dry and there was some soil drifting. Germination of the spring sown grain crops was delayed until the middle of June when there was an abundance of rain. The rainfall in July was about average but in the remaining months of the year it was below average. A severe frost on August 23 had a decidedly adverse affect on the yield and quality of wheat.

The small breeding herds of pure-bred Shorthorn and Holstein cattle are accredited, having successfully passed the tuberculin and contagious abortion tests. Work with swine is now confined to Yorkshires and within a year breeding stock should be available for sale to farmers.

It is obvious from the results of soil cultural experiments that means and methods of soil cultivation for wheat production should be applied primarily for weed destruction, and that soil tillage as such has only a minor influence on yields, excepting as it may promote or retard soil drifting. Increasing attention is, therefore, being given to the efficiency of tillage implements in the destruction of weeds.

It is hoped to develop methods of tillage for weed control which will be more effective and less costly than some methods now used. Experiments with harvesting methods now include studies of Combine accessories such as the windrow harvester and pick-up and the header-barge method. Crop rotation experiments are also being carried on.

Special machinery has been devised and constructed for use in connection with the rod-row method of testing cereals. This work has developed to a point where it is now possible to supply some of these machines to other Experimental Stations. The co-operative cereal variety tests are yielding results which are of distinct value in determining the adaptability of varieties to certain districts.

Native grasses are being propagated with a view to determining if any of these have possibilities as cultivated hay or pasture crops.

In the shelter belts and ornamental plantings very few varieties show any winter damage or serious damage from insects or diseases. The fruit plantation is doing well, most of the tender sorts having been already eliminated.

Further development has been made in the poultry work towards producing better breeding stock for sale to poultry men and farmers.

Experimental Station, Lethbridge, Alta.

This Station is serving a particularly useful purpose inasmuch as it deals with problems arising in connection with the two distinct types of farming practised in southern Alberta, namely, irrigation and dry farming.

Field husbandry experiments on the irrigated part of the Station include crop rotations, use of irrigation water, soil moisture studies, dates and rates of seeding tests and the study of other cultural practices. The data secured from experiments to determine the proper stage of growth at which to apply water to common farm crops have been thoroughly analyzed and prepared for publication. Crop rotations and cultural experiments are also under way on the dry land.

Splendid progress has been made in the development of a pure-bred Percheron stud. There has also been a marked increase in the average milk production in the herd of pure-bred Holstein-Freisian cattle, following a severe culling. Experiments in the winter feeding of beef cattle were continued. Of distinct interest to the range sheep industry was the importation from New Zealand of a ram and five Corriedale ewes to augment the flock of grade Corriedales already at this Station. Straw covered hog cabins and straw sheds have proven very satisfactory for the winter housing of growing pigs.

In the poultry work attention is directed chiefly towards problems of management and the breeding of Barred Plymouth Rocks for high egg production with satisfactory size of egg. The Alberta Egg Laying Contest is also conducted at this Station.

Cereal variety tests were conducted under both dry and irrigated conditions and there was also produced Elite Stock of Marquis wheat seed and Reward wheat for seed purposes.

The work with forage crops has for its main objective the finding or development of varieties or strains better adapted to the conditions than any that are now commonly grown. Strains of alfalfa were grown for comparison as to yield, quality and winter hardiness. Some interesting work is also being carried on with sugar beets under irrigation.

The fact that farmers especially in the older settled districts and on irrigated land are taking more and more interest in the beautifying of their homes may be attributed in no small measure to the horticultural work conducted at this Station.

Beekeeping has become an established industry in the irrigated sections in southern Alberta, and many problems peculiar to this locality are being investigated in the apiary at this Station.

Experimental Station, Lacombe, Alta.

With a warm dry spring seeding was completed earlier than usual but much of the grain seeded on spring ploughing did not germinate until rains came in June. After that all crops made a strong growth but were damaged by frosts in August.

The Shire stallion "Snelston Topper" —38528— has had an excellent breeding season, serving seventy mares. In addition to the breeding operations experimental work was carried on in the control of joint ill, and methods of wintering brood mares and idle horses. Beef cattle are represented at this Station by a splendid herd of Aberdeen-Angus cattle and the work centres largely around the development and sale of breeding stock. There is also a fine dairy herd of Holsteins. Both herds have successfully passed the tuberculin test. Studies in contagious abortion are now being carried on in co-operation with the Health of Animals Branch. A number of swine feeding tests were also conducted and preliminary work was done towards the establishment of a system of Advanced Registry for swine.

Results obtained in the field crops investigations indicate that while wheat is the most profitable crop produced, better results with respect to yields, profit, weed control and soil hygiene are obtained if a mixed farming rotation is followed.

Variety and strain tests of cereals and forage crops were continued and field experiments in the control of root rots were initiated.

The flock of White Wyandottes have shown a very satisfactory increase in egg production during the past year and the birds which reacted to the tests of Bacillus Pullorum have been disposed of. Some interesting and useful experiments were conducted and data were recorded on the cost of egg production and the cost of rearing young chicks.

The highest yield from any one colony in the spring was 310·5 pounds of extracted honey, and results on the whole indicate that central Alberta is a very satisfactory region for beekeeping. Some of the problems being studied are swarm control, disease control and methods of winter and summer protection.

Experimental Substation, Beaverlodge, Alta.

The cereal variety and strain tests at this Station are conducted in rod-row plots. Some two dozen varieties of winter wheat came through successfully and producing yields ranging from 27 to almost 45 bushels per acre. Spring wheat yielded from 32½ to 47 bushels, 39 pounds per acre. Marquis did rather better than usual, but the varieties Garnet and Reward give promise of being of distinct benefit to this district. Banner and Victory are the two leading varieties of oats. The Substation is co-operating in an effort to organize a local Seed Growers' Association for the cleaning, grading, inspection and merchandising of registered and No. 1 commercial seed.

Alfalfa, sweet clover, Western rye grass and brome are the four meadow crops most suitable to this district. Alfalfa does exceedingly well, the greatest difficulty being to keep the stands free of annual weeds. In seed production there has been only one non-paying crop since 1922.

A study is being made of the effect of local topography upon the occurrence of minimum temperatures, including summer frosts. The records clearly indicate the wisdom of devoting the lowlands to frost hardy crops such as hay and "green feed," and the high land by preference, to wheat, barley, flax, potatoes and gardens.

Many species of woody perennial trees, shrubs and vines have come successfully through one or more winters at this Station. Hollyhocks also wintered over in the open and did very well. Several score of varieties of small fruit bushes have been planted, and some fine hedges of Saskatoons are now flowering and fruiting annually. Corn, beans, squash and tomatoes do well every year.

Much useful information was supplied to prospective land settlers, and to inquirers seeking guidance in cultural matters, etc.

Experimental Station, Summerland, B.C.

Precipitation during the first seven months of the year was very heavy but the last five months were very dry. The total precipitation was slightly below average and temperatures were about normal. Severe hail-storms in May and June and heavy winds in the fall did much local damage to fruit crops. The high percentage of low grade fruit however was attributable largely to lack of adequate thinning.

It was again possible to give practical advice to fruit growers in respect to the proper date of harvesting different varieties of apples, based on results obtained experimentally during the past five years. Breeding work was continued with apples and small fruits, and a determined effort is being made to

secure a profitable yielding variety of peach for canning purposes. Work is also under way towards the development of hardy root stocks for apples in an endeavour to counteract the heavy annual loss of trees from collar rot.

The work of breeding superior strains and varieties of tomatoes, cantaloupes, egg plants, peppers, etc., has progressed to a point where Elite Stock seed will soon be available from this Station.

Tobacco gave an excellent yield and the quality was superior to that of previous years. In addition to the experimental work with air cured tobacco, three acres of Warne and Hickory Prior were grown and flue cured.

Steady improvement has been made in the herd of Jersey cattle which again successfully passed the annual accreditation test for tuberculosis. There is an outstanding Berkshire sow herd at this Station, and with the new herd sire Compton Hall 69327, an ideal bacon pig received from the Central Experimental Farm late in the year, some excellent Berkshires should result.

The flock of White Wyandottes has been rebuilt with disease free and practically worm free stock and there has been a very marked improvement in production.

Farmers in the fruit districts are being encouraged to keep more dairy cattle, swine and poultry.

Experimental Station, Windermere, B.C.

Seeding was completed in April without interruption. May was a very bright and unusually dry month with very high temperatures on several days, consequently seedlings coming up in sandy soils were burned off at the ground. Clover and alfalfa seedlings and small grains all suffered but with the many showers in June and a plentiful supply of irrigation water better stands were secured than might have been expected. Harvesting conditions were good.

The herd of Ayrshire cattle at this Station successfully passed its fourth successive T.B. test and by arrangement with the Health of Animals Branch is now being tested for contagious abortion. All animals are entered in R.O.P. as they freshen and some creditable milk records have been made. Further improvement is expected to result from the introduction of the young bull Ottawa Supreme 40th —113116— received from the Central Experimental Farm, Ottawa. There is also a breeding herd of Yorkshire swine and a very large percentage of the swine in the district can be traced to stock raised on this Station. The value of good pure-bred rams is being demonstrated by the use of Hampshire rams on grade ewes.

Alfalfa, peas and potatoes are the outstanding crops in the rotations which vary from three to ten years duration.

Variety tests of cereals and forage crops were conducted, but roots for feeding purposes and small grains are costly crops to produce in this district. However, the large crops of peas obtainable are likely to keep this crop to the fore.

The pea selections "Director", "Bruce", and "Kootenay" have met with a good reception and some very promising canning peas are also being developed.

A four-year rotation is being used in an experiment to find out the best way to maintain and improve the fertility of the soil on the Windermere area. Three systems have been adopted, namely, fertilizers alone, fertilizers with barnyard manure and fertilizers with a crop ploughed in.

Pedigree breeding is well underway in the poultry plant, preliminary to line breeding. While no outstanding records were made during the past year the flock average was very satisfactory.

A good crop of excellent quality honey was produced in the apiary.

Experimental Farm, Agassiz, B.C.

The year 1928 was the driest recorded in the history of this Farm. Fortunately the precipitation which fell during the growing season was well distributed and was sufficient to produce good crops.

Horse breeding has been successfully carried on at this Farm for nearly a decade and some splendid Clydesdales have been reared.

The herd of Holstein-Friesian cattle has an excellent milk production record and one cow Agassiz Pietje Inka Sylvia, during the past year produced 1,257 pounds of fat. This herd has also made a name for itself in the show ring. The entire herd has been produced from six foundation cows, and all the animals in the herd at the present time, with the exception of one cow, were born and bred on the Farm.

Variety tests of fruits, vegetables and flowers have been carried on for many years and it has now been decided to suspend these and specialize in foundation stock seed of vegetables.

New grass and clover plots were sown for future study, and the usual variety tests of mangels, carrots, sugar beet, corn, sunflowers, etc., were continued.

Another successful year was experienced in the poultry plant in which the flock of Barred Plymouth Rocks has established a world-wide reputation for production. The Egg Laying Contest conducted at this Farm continues to be a source of tremendous interest amongst poultry breeders.

The apiary has been increased to sixty colonies and the scope of the work has been enlarged to include rearing, mating and introduction of queens.

Experimental Station, Saanichton, B.C.

Though the rainfall for the year was below the average the amount which fell during the growing season was greater than in some years and most crops were good, an exception being the fruit crop which was below the average in quality and yield.

In co-operation with the Health of Animals Branch a series of blood tests have been made of all the cattle in the pure-bred Jersey herd at this Station, with the object of establishing a herd free from contagious abortion. Definite progress has been made.

The poultry industry is of considerable importance on Vancouver Island, hence at the Sidney Experimental Station a good deal of attention is given to poultry work which embraces breeding, rearing, feeding, housing and hatching and related problems. Considerable interest has been manifested in the G. 18 family, which has an enviable record.

Of outstanding interest in the work with forage crops are the promising results obtained with Giant White French Artichokes which though of no great value in the interior promise to be of great value on the coast. From the standpoint of yield, dry matter and analysis they show every advantage over corn and sunflowers as a silage and experiments are now underway to determine their feeding value.

The fall seeding of grain is gradually changing the type of cereal husbandry on the lower end of Vancouver island and this phase of cereal work is receiving particular attention.

Horticulture is the major line of work at the Station with special attention being given to bulb growing and the production of Elite registered vegetable seed. Another feature of the horticultural work which is attracting a good deal of attention is that of Cob, Filbert and Walnut production. Breeding work with small fruits is also being carried on.

Experimental Substations

The Experimental Substations serve a most useful purpose in ascertaining the agricultural possibilities of remote districts, where the establishment of a fully equipped Experimental Station is not warranted. The oldest of these Substations is situated at Fort Vermilion, Alta., and on the whole excellent results have been obtained from the Experimental work conducted. The past season, however, was characterized by high winds and a smaller amount of precipitation than usual. The land was abnormally dry and consequently germination was slow and growth irregular. Corn and sunflower crops were poor and their feeding value was impaired by frosts. Root crops were about average. Yields of grasses were low but the quality was excellent. Fall sown crops winter killed very badly and winter wheat was a total loss. The extremely dry weather resulted in the rapid ripening of all crops and the harvest was considerably earlier than usual.

At Salmon Arm, B.C., the work consists chiefly of variety tests with tree fruits. The practice of ploughing under green crops to provide much needed humus and nitrogen to the orchard soils was continued.

Experimental work was also conducted under the supervision of the clergy in charge of the Missions at Forts Smith, Resolution and Providence, Northwest Territories, and at Betsiamites, Saguenay county, P.Q. A new Substation has been established at Fort Good Hope, N.W.T.

DAIRY AND COLD STORAGE BRANCH

GENERAL

Possibly the most interesting and satisfactory feature of the dairying season of 1928 in Canada was the relatively high price of cheese and the remarkable improvement in its quality as shown by the grading returns. There was also some increase in the production of cheese as compared with the previous year. The position of Canadian cheese on the British market steadily improves and, with the decrease in the production of cheese in England and Scotland, there is a new opening for the highest type of Canadian cheese. No other cheese imported into the United Kingdom so nearly approaches the standard of the best English and Scotch Cheddars. Of late years the price for the best cheese made in the United Kingdom has averaged about 3 cents per pound above any imported cheese sold as such. The outlook for Canadian cheese is excellent, provided the high standard of quality is maintained.

THE WORLD'S DAIRY CONGRESS

The outstanding event of the year in the dairy world was the International Dairy Congress held in London, England, June 26 to July 12. The Dominion of Canada was officially represented by three official delegates, including myself, the Dairy Commissioner, and the Chief of the Division of Dairy Research. The provinces were all represented, with the exception of the Maritime provinces, and there was one delegate from the National Dairy Council. The total number of Canadian delegates, not including members of the delegates' families, was fifteen. The congress was well organized and the program, while somewhat one-sided, was very efficiently carried out. Opportunity was given to see something of dairying in England and Scotland, and the arrangements for the tours were very complete. While nothing very startling or new was brought out in the papers or discussions, the report contains a lot of useful anl up-to-date information and makes a valuable contribution to the literature of dairying. The

contacts which these Congresses make possible between those engaged in similar work from all over the civilized world, are probably the most useful result of such meetings. Some forty-five countries were represented at the congress.

PRODUCTION

Complete figures are not available for the total production of butter and cheese during the season of 1928, but the indications are that there will be an increase in cheese production and some decrease in creamery butter. The production of creamery butter has been fairly well maintained and shows some increase in Eastern Canada, but there was a further decrease for the year in the prairie provinces. It is satisfactory, however, to note that since November, 1928, when it was evident that the year's wheat crop was not up to expectations, the production of butter in the three prairie provinces has shown a large percentage increase. The production in Saskatchewan from January to April, 1929, was 111 per cent over the same period in 1928. To the end of May, the increase is 44 per cent. The increase in Manitoba for the same period is 34 per cent, and Alberta is reported to have an increase of 40 per cent.

THE EXPORT TRADE

There was practically no export of butter to the United Kingdom during the past year, but shipments to the West Indies and Newfoundland are showing some increase. The total quantity of butter exported to these countries during the year under review was 1,889,200 pounds. The price of butter in Canada during the calendar year 1928, ranged from 1½ cents to 5 cents per pound above export values, based on the world's market in the United Kingdom. The exports to the West Indies, the Orient and Newfoundland command a premium over the world's market.

Strictly comparative figures for the exports of cheese have been rather difficult to get during the past few years, as the storage of cheese for processing, and the practice which has grown up of importing firms in the United Kingdom buying Canadian cheese and holding it in storage until the middle of the following summer, has made the figures of exports during the fiscal year somewhat erratic and misleading.

Canada has lost her connection, for the present, with the United Kingdom market so far as the butter trade is concerned. The position of cheese was never as strong as it is at the present time. Canadian cheese commands a premium of 1½ cents per pound on the average over cheese of the same type from any other country. The grading system has facilitated trading and has increased the goodwill towards Canadian cheese.

EXPORTS OF CREAM

The exports of cream showed some decrease during the last 12 months. The relative high price of cheese and the inspection restrictions have contributed to that end. Many farmers considered that the returns from the cheese factory in 1928 were as good, everything considered, as the return from cream exports.

If and when the production of creamery butter again overtakes home consumption, there will be no difficulty in finding a market in the United Kingdom for any that may be available. That market is always open for Canadian dairy produce of good quality. If Canadian producers are excluded from any other markets by prohibitive tariffs, it will only mean that the volume of our exports to the Motherland will be increased to that extent.

THE GRADING OF DAIRY PRODUCE

A dairy produce grader, with other duties, was appointed at Vancouver, B.C., during the year, and the Civil Service Commission is now proceeding with a similar appointment at Halifax, N.S. These two officers will also act as cargo inspectors and inspectors of dairy products. There will not be much grading at either point, but it has been found necessary to make this provision to take care of the occasional lots offered.

With these appointments, the system seems to be fairly complete. The full list of grading centres and the number of graders at each is as follows:—

Grading Centres	No. of Graders	Grading Centres	No. of Graders
Charlottetown, P.E.I.	1	Winnipeg, Man.	3
Halifax, N.S.	1	Regina, Sask.	2
Quebec, P.Q.	1	Saskatoon, Sask.	2
Montreal, P.Q.	16	Edmonton, Alta.	2
Belleville, Ont.	1	Calgary, Alta.	1
Stratford, Ont.	1	Vancouver, B.C.	1
Toronto, Ont.	2		

In addition to the above list, there is one senior grader (Grade 4) in charge at Montreal, and one whose headquarters is at Winnipeg, Man., with supervision over all grading in the prairie provinces.

A summary of the federal gradings of butter and cheese for the calendar year of 1928 is given together with the 1927 figures for comparison. Attention is drawn to the high percentage of first grade cheese, and especially to the increase for the year in the highest grades. The record for Western and central Ontario shows over 97 " special " and " first " grade.

FEDERAL BUTTER AND CHEESE GRADING

PASTEURIZED BUTTER

Province	1928					1927				
	Packages	Spl.	1st	2nd	3rd	Packages	Spl.	1st	2nd	3rd
		%	%	%	%		%	%	%	%
Prince Edward Island	7,613	0·7	98·8	0·4	0·1	9,508	13·5	84·6	1·9	.....
Nova Scotia	250	.....	100·0	.....	.....	632	.....	49·9	43·8	6·3
New Brunswick	.....	.....	.....	.....	.....	108	.....	92·6	.....	7·4
Quebec	293,754	0·1	90·7	8·8	0·4	294,197	0·6	92·1	7·0	0·3
Ontario	59,744	.....	78·8	20·3	0·9	47,179	.....	78·0	20·9	1·1
Manitoba	146,769	0·2	72·4	20·5	6·9	157,671	0·2	66·5	23·8	9·5
Saskatchewan	91,472	0·2	61·9	23·9	14·0	133,560	0·1	52·3	31·8	15·8
Alberta	59,162	1·1	69·3	22·9	6·7	37,838	0·3	60·1	30·2	9·4
British Columbia	4,381	6·6	63·2	22·3	7·9	195	.....	64·7	25·6	9·7
Totals	663,145					680,888				
Average percentage	.....	0·2	79·6	15·8	4·4	.....	0·5	75·5	18·0	6·0
Packages by grades	.....	1,744	527,865	104,596	28,940		3,480	513,891	122,297	41,220

FEBERAL BUTTER AND CHEESE GRADING—*Concluded*

UNPASTEURIZED BUTTER

Provinces	1928				1927			
	Packages	1st	2nd	3rd	Packages	1st	2nd	3rd
		%	%	%		%	%	%
Prince Edward Island					63		100·0	
Nova Scotia					63	34·9	65·1	
New Brunswick	114		97·4	2·6	242	20·2	70·7	9·1
Quebec	59,116	67·5	30·9	1·6	87,122	74·7	24·2	1·1
Ontario	3,295	22·3	75·5	2·2	1,726	32·2	59·5	8·3
Manitoba					42	73·8	26·2	
Saskatchewan	88	35·2	64·8					
Alberta	98	21·4	67·4	11·2	125	26·4	67·2	6·4
British Columbia	74		14·9	85·1	261	27·6	72·4	
Totals	62,785				89,644			
Average percentage		64·8	33·5	1·7		73·5	25·3	1·2
Packages by grades		40,666	21,028	1,091		65,843	22,694	1,107

CHEESE

Province	1928				1927			
	No. Boxes	Spl. & 1st	2nd	3rd	No. Boxes	Spl. & 1st	2nd	3rd
		%	%	%		%	%	%
P.E.I	17,169	94·9	4·6	0·5	16,099	91·9	6·2	1·0
Nova Scotia								
New Brunswick	253	9·1	66·0	24·9	164		26·2	73·8
Quebec	506,533	85·88	13·18	0·94	413,061	74·1	24·5	1·4
Ontario	1,041,876	96·7	2·9	0·4	1,040,133	92·6	6·8	0·6
Manitoba	1,374	82·2	18·9	0·9	2,876	77·8	21·0	1·2
Saskatchewan								
Alberta								
British Columbia								
Totals	1,567,205				1,472,333			
Average percentage		93·1	6·3	0·6		87·4	11·8	0·8
Boxes by grades		1,459,843	96,784	8,578		1,286,046	173,764	12,523

ICED CAR SERVICE FOR BUTTER AND EGGS

Under agreement with the different railway companies, weekly iced car services for butter and eggs were maintained over specified routes to Toronto, Montreal, Quebec and Halifax during the months of May to September inclusive. Under this arrangement the department guarantees earnings on the cars operated and shippers of creamery butter and of eggs, located on the routes over which such cars operated had the advantage of iced car services for l.c.l. shipments whereas otherwise shipments would require to be made by way freight to the detriment of the quality of the produce, by express with higher transportation rates and with detriment to the quality or else shippers would be obliged to hold the produce until a car load was accumulated which, in many cases, would also be to the detriment of quality. When earnings on such cars exceeded the amount of the guarantee, the Department paid nothing to the railway for operating the service but when earnings were less than the guarantee, the Department paid the railway company the difference between the actual earnings and the amount of the guarantee.

ICED CAR SERVICE FOR CHEESE

Under arrangement with the different railways, the Department paid icing charges on a maximum number of cars weekly throughout June, July and August for the transportation of cheese for export. The Department did not guarantee earnings on iced cars for cheese and icing charges were only paid on such cars as arrive at destination with a specified minimum tonnage. As is the case with iced cars for butter and eggs, iced cheese cars gave a "pick-up" service and l.c.l. shippers of cheese, located on routes over which such cars operate had the advantage of iced car service without additional cost.

REFRIGERATOR CAR INSPECTION

Refrigerator car inspectors were stationed at the Montreal terminals of the two principal railways in order to learn and report on the condition of iced butter and cheese cars on arrival at destination. These officers reported on the amount of ice in the car on arrival at destination, tonnage carried, temperature and condition of the produce, condition of packages, manner of storage, etc. Reports of improper conditions were transmitted to the responsible person in order to effect improvement. At Quebec and Halifax, officers of the department engaged in other work performed the function of refrigerator car inspectors in so far as cars operated under agreement with the department and terminating at those points are concerned.

CARGO INSPECTION

As for many years past cargo inspectors were maintained at Halifax, at Vancouver, at Quebec and Montreal during the period of navigation, and during the winter months at the winter ports of St. John, N.B., and Portland, Me., as well as at London, Southampton, Bristol, Liverpool, Manchester and Glasgow in the United Kingdom. Cargo inspectors, located in Canada, whose work is not supported by any statutory authority but depends rather on co-operative support from the shipping companies, reported on the condition of perishable produce and on packages containing the same, being exported from Canada. They also maintained a supervision of the handling of perishable produce into the ships' holds and of the manner of stowage. Cargo inspectors in the United Kingdom whose presence on the docks and in the ships also depends on the co-operation of the shipping companies rather than on any statutory authority, maintained a supervision of the handling of perishable produce during discharge and reported on the condition of the produce and of the packages containing the same. Reports of improper handling or other undesirable condition were transmitted to the proper ones in order to correct such abuses.

Self recording thermometers (thermographs) in perforated locked boxes were placed in the ships' holds with consignments of perishable produce in order to secure continuous records of temperatures at which produce was transported. On arrival of the ships in the United Kingdom, the charts were removed from the thermographs and mailed to the Ottawa office where they were blue printed and copies sent to exporters, to the shipping companies and to other interested parties including officers of the different branches of the Department of Agriculture in Ottawa and the United Kingdom as well as to the Empire Marketing Board in the United Kingdom.

DAIRY NEWS LETTER

A Dairy News Letter of about ten pages was issued on the 10th of each month. This News Letter was mimeographed and contained statistical information relative to quantities of butter and cheese graded monthly in Canada and in New Zealand, imports of dairy produce monthly into Canada and into

the United Kingdom, monthly exports of dairy produce from Canada and storage stocks of dairy produce in Canada and the United States at the beginning of each month. In addition, information of general interest regarding dairy matters from an international standpoint was included. The News Letter was sent to all cheese factories and creameries and to any other persons, firms or organizations sufficiently interested to request the receipt of the same.

DAIRY MARKET INTELLIGENCE

From April to November, a Dairy Produce Market Report was published and issued each Monday. The report was mimeographed and sent to cheese factories and creameries and to any others requesting the same. A review was given of the dairy produce markets for the previous week at Montreal, Toronto and New York as well as a record of transactions on the principal country dairy boards of Ontario and Quebec. The condition of the Montreal and Toronto markets down to noon of the Monday of publication was also shown as well as a record of grading of cheese, receipts of butter and cheese at Montreal, and exports of butter and cheese from the Port of Montreal during the previous week.

The statistics of the quantities of cheese graded are the most reliable index of current production since Ontario and Quebec produce about 96 per cent of the total cheese production of Canada and since practically all the cheese produced in these two provinces is graded. Grading statistics of butter are not a reliable index as to volume of production since only about 25 per cent of the total production of creamery butter is offered for grading. Fluctuations in the quantities of butter offered for grading more generally reflect increasing or decreasing market activity than increasing or decreasing volume of production.

In addition to the weekly market repart, telegraphic market reports were also issued principally on Monday and Friday. Prepaid telegrams were sent to the different provincial departments to be relayed to those in the respective provinces desiring the information and in addition telegrams were sent directly to others wishing to receive them. There is no charge for the service, the recipients only paying telegraphic costs.

Subsidies to Cold Storages

Further payments on contracts previously entered into for the erection of public cold storage warehouses at O'Leary, P.E.I., Stellarton, N.S., Chicoutimi, P.Q., Rivière du Loup, P.Q., Quebec, P.Q., Montreal, P.Q., and Toronto, Ont., were made during the year.

The terms of a contract provide that the federal Government shall pay 30 per cent of the approved cost of the warehouse in four instalments: 15 per cent on completion of the warehouse, at the end of the first year 7 per cent, at the end of the second year thereafter 4 per cent, and at the end of the two next succeeding years 2 per cent, providing the warehouse is maintained and operated to the satisfaction of the Minister of Agriculture.

Creamery Cold Storage Bonuses

The specifications and blue prints of plans for creamery refrigerators were sent free of cost to all creameries requesting the same and any creamery constructing a refrigerator in accordance with the plans supplied receives, under certain conditions, a grant of $100. The conditions entitling one to the grant are briefly that the refrigerator so constructed maintains suitable temperature and is favourably reported after being inspected by an officer of the branch. Applications for the $100 grant were received during the year from fifty-two creameries of which forty received the payment, the remaining twelve applications being either refused or held over to next year pending necessary alterations.

THE ADMINISTRATION OF THE DAIRY INDUSTRY ACT, 1928-29

The staff engaged in the administration of the Dairy Industry Act consisted this last year of one chief inspector, five full time inspectors and six part time inspectors. The more important provisions of the Act are those prohibiting the manufacture and sale of

(*a*) substitute for butter manufactured wholly or in part from fat other than that of milk or cream;
(*b*) butter containing more than 16 per cent of water;
(*c*) butter or cheese containing less than the specified minimum of milk fat;
(*d*) butter in prints of improper weight;
(*e*) butter or cheese which is falsely or improperly branded.

Inspectors made preliminary tests for water content of samples of butter secured from manufacturers, wholesalers and retailers. Samples which, according to the preliminary tests, show more than sixteen per cent of water as well as samples of butter or cheese suspected of being adulterated by means of foreign fat or of containing less than the legal minimum of fat were submitted for chemical analyses. Inspectors made preliminary tests of 7,651 samples of butter of which 986 samples showed more than 16 per cent of water. In this connection, it should be noted that inspectors become quite expert in selecting samples which appear by observation to be suspicious and frequently do not take samples of butter which are manifestly unadulterated.

The following statement shows the number of convictions secured on account of various offences and amounts of fines imposed:—

Offence	Number of convictions	Fines
		$
Excess water in butter	78	1,523 30
Butter substitute containing fat other than that of milk or cream	7	1,425 00
Short weight prints of butter	4	105 00
Skim milk cheese not branded as such	1	15 00
Incorporating inferior curd in cheese	1	10 00
Total	91	3,078 30

Convictions secured during the year show a decrease of 27 as compared with the previous year, and fines a decrease of $787.05.

The authority conferred by the Act to seize and confiscate illegal dairy products or equipment used in the manufacture or manipulation of illegal dairy products is only exercised in extreme cases. Following is a statement of such confiscation of butter showing the number of confiscations on account of different offences, the number of pounds so confiscated and the proceeds from the disposal of the same:—

Offence	Number of confiscations	Number of pounds confiscated	Net proceeds
Sale of substitute for butter	8	1,137	$200 73
Short weight prints of butter	2	23	6 89
Butter containing over 16% water	3	127	26 23
Total	13	1,287	$233 85

The proceeds from fines imposed and from sale of confiscated products have been remitted to the Receiver General.

NEW REGULATIONS UNDER PART I OF THE DAIRY INDUSTRY ACT, 1914

As a result of tests made at the request of the Dairy and Cold Storage Branch by the Forest Products Laboratories, Department of the Interior, it was found that maximum strength in cylindrical wooden veneer boxes for cheese was obtained when the boxes were constructed in a particular manner, and that additional strength was obtained when the boxes were reinforced by either flat metal strapping or by wire. Consequently, regulations under authority of Part I of the Dairy Industry Act were made by Order in Council on the twenty-sixth day of February, 1929, which provided that on and after the first of June, 1929, cylindrical wooden veneer cheese boxes containing cheese for export should be constructed in a specified manner, and also that the boxes be reinforced either by flat metal strapping or by wire. While these regulations become effective the first of June, 1929, factories will be permitted to use up stocks of boxes on hand at the opening of the 1929 season, which may not comply with the new regulations.

These regulations should effect an improvement in the condition of boxes containing Canadian cheese on arrival at United Kingdom and other export markets.

ADMINISTRATION OF THE REGULATIONS UNDER THE MEAT AND CANNED FOODS ACT GOVERNING THE MANUFACTURE, IMPORTATION AND SALE OF CONDENSED AND DRIED MILK

By Order in Council dated the fourth of January, 1929, the administration of the regulations under the Meat and Canned Foods Act governing the manufacture, importation and sale of condensed and dried milk was transferred to the Dairy and Cold Storage Branch. The administration of these regulations, particularly in so far as they govern the manufacture of condensed and dried milk, was entrusted to an officer of the branch with long practical experience as superintendent of a condensing establishment, and manufacturers are now receiving assistance by way of expert advice on problems of manufacturing. With the aid of the Research Division of the Dairy and Cold Storage Branch in this connection, valuable assistance, which has been much appreciated, has already been rendered to some manufacturers.

RESEARCH IN DAIRYING

During the past year particular attention has been directed by the Division of Dairy Research to a colour defect in Cheddar cheese. The main factors responsible for the defect have been determined through bacteriological and biochemical studies. The defect has been reproduced in experimental cheese. While a more detailed laboratory study is in progress, the data already accumulated and supplied to cheesemakers should assist greatly, if not completely, in controlling this defect.

Further work in connection with a committee of the American Dairy Science Association for the purpose of establishing a standard technique for the microbiological examination of butter has been continued.

With a view of determining further the significance of yeasts in pasteurized butter, systematic studies of this group are being pursued.

An exceedingly useful service has been rendered by the division to butter manufacturers in the extension of mould and yeast work in the manufacture of commercial and exhibition butter.

The Division assisted throughout the year in inaugurating and conducting a number of milk and cream competitions in conjunction with provincal and convention exhibits.

Assistance has been given on outbreaks of ropy milk and other abnormal milks. A number of bacteriological and chemical tests were made on samples of well water, butter, cheese, milk, condensed and evaporated milk and milk powder.

Scientific articles have been contributed to the press and dairy magazines. Meetings and conventions in the various provinces were addressed as in former years.

MILK UTILIZATION SERVICE

The work, which has for its object the dissemination of information as to the food and nutritional value of milk and its products, has been carried on along the more or less established lines during the year. The dietitians employed in this work had booths for demonstration purposes at the leading exhibitions, attended meetings of health and child welfare organizations, women's institutes, dairy conventions and other similar gatherings.

A popular phase of the work is the distribution of material for use in the school health program. Stories, a play, and a bookcover for school books stress the importance of dairy foods and have been an effective means of stimulating the interest of children in good food habits. Teachers-in-training at Normal Schools are made acquainted with the aids to health teaching available from this Branch. The booklets used in the schools and those prepared for the housekeeper are being printed frequently to meet the continued demand.

A poster—Milk, Builder of Nations—has been distributed upon request to many public health nurses, school teachers and other interested people.

GENERAL NOTES

The services of the headquarters staff of the Dairy and Cold Storage Branch have, as usual, been in demand to address conventions and special dairy meetings in every part of the country. Numerous special articles for agricultural and trade journals have been written, on request, by the Commissioner and other officers covering technical and practical subjects relating to the industry. These articles have appeared in the trade journals in the Old Country as well as in Canada.

The Branch lost a very efficient officer in the person of Mr. W. G. Cameron, Dairy Produce Grader at Calgary, who resigned to take a position with a dairy company where his prospects seemed to be better than in the grading service at the present scale of salaries.

HEALTH OF ANIMALS BRANCH

This Branch, composed of three divisions, is employed in safeguarding the health of our live stock industry, our foreign markets and our export meat trade. Every care is taken to prevent the entrance of disease from foreign countries and to maintain the health of our own live stock. Research work is constantly carried out on problems of contagious disease and with a view to improving our methods of control.

Contagious Diseases Division

This Division is concerned with the eradication and control of contagious disease of live stock within Canada and the prevention of the introduction of infection from other countries.

The persistence of serious contagious disease in many countries, particularly in Europe, renders necessary the enforcement of restrictive measures to protect the live stock of this country.

Serious outbreaks of foot and mouth disease continue to occur over practically the whole of Europe and as foot and mouth disease has never gained entrance into Canadian herds it is evident that no relaxation of the protective measures adopted can be permitted if we are to maintain this enviable record.

Owing to the freedom of Japan, the Commonwealth of Australia and the Union of South Africa from foot and mouth disease and rinderpest the restrictions against the importation of merchandise packed in hay, straw or other products of the soil were removed by order dated respectively April 3, April 24 and May 28, 1928.

On May 5, 1928, an order was issued prohibiting the importation of meats, other than cooked canned meats, from the Argentine Republic, Uruguay and Paraguay. This was necessary to prevent the introduction of foot and mouth disease from these countries.

As Northern Ireland and the Irish Free State were declared to be free from foot and mouth disease an order dated September 12, 1928, was issued that the importation of cattle, sheep, other ruminants and swine from Ireland would be considered provided the shipments came direct and were accompanied in addition to the usual certificates, by an affidavit that the animals had been in Ireland for sixty days immediately preceding shipment. The restrictions governing the importation of merchandise packed in fodder were also cancelled in respect to shipments from Ireland. On October 8, 1928 the restrictions against the importation of live stock and fodders from Japan were removed as this country was reported to be free from foot and mouth disease, rinderpest and contagious pleuro-pneumonia. On December 24, 1928, an order was issued permitting the importation from all countries of bran, middlings, beet pulp and other mill feeds, corn, oats, wheat, rye and other grains for use in feeding live stock provided the shipment was accompanied by the certificate of a British Consular Officer or other authorized official that the product was sacked in new bags and was transported to the vessel conveying it to Canada in disinfected cars, lighters or chutes.

An outbreak of foot and mouth disease occurred near Los Angeles, California, and consequently an order was issued on January 18, 1929, imposing restrictions upon importations of live stock and their products as well as grain and fodders from California, Oregon, Nevada and Arizona in the United States and Sonora and Lower California in Mexico. Owing to the rapidity with which this outbreak was brought under control it was possible to relax the restrictions by order on March 25, 1929, in order to admit horses, dogs and poultry and in transit shipments through Canadian territory excepting those of ruminants and swine and manure.

In order to facilitate the disinfection of railway stock cars Saskatoon was added to the list of car cleaning stations included in Order No. 37.

On February 11, 1928, Ladner, B.C., was removed from and Boundary Bay, B.C., added to the list of ports of entry for the inspection of live stock entering Canada.

As this country has been comparatively free from contagious diseases and no shipments of store cattle have been exported it has been possible to employ a greater number of veterinary inspectors in the control of tuberculosis.

Glanders.—Two outbreaks of glanders occurred in Quebec and one in Saskatchewan. This disease is controlled by a policy of slaughter and payment of compensation.

Hog Cholera.—The most extensive outbreak of hog cholera which has occurred for thirteen years was experienced during the past year. This disease occurred in Nova Scotia, Quebec, Ontario, Alberta and British Columbia. The outbreak in Ontario required the concentration of seventeen inspectors in Essex

county district before its spread was arrested. Hog cholera is controlled by a policy of slaughter of infected hogs and payment of compensation along with immunization with anti-hog cholera serum of all swine in close proximity.

Mange.—Mange in cattle has occurred in Ontario, Manitoba, Saskatchewan, Alberta and British Columbia. The number of cases reported are relatively few and the number of cattle quarantined for treatment is less than in former years.

A few outbreaks of mange in horses have been dealt with but in none was the infection widespread. In the past year horse mange was found in New Brunswick and in the adjacent territory in Quebec and also in Manitoba and Saskatchewan.

Sheep Scab.—No case of sheep scab has been reported during the past year.

Anthrax.—Two outbreaks of anthrax were confirmed in Ontario. This disease rarely occurs in Canada but in order to prevent its introduction supervision is maintained over all hides, skins, wool and hair from infected countries and if uncertified they go forward under restrictions to be disinfected at destination.

Dourine.—This disease has been definitely eradicated from Canada. No case has been detected for nine years.

Rabies.—Rabies has only occurred in Ontario and Quebec. It has not been necessary to quarantine any area as the disease has been kept under control by individual quarantines of all contacts together with the co-operation of municipalities in enforcing local by-laws restricting the movements of dogs.

Tuberculosis.—The control of bovine tuberculosis is limited by the number of veterinary inspectors available and the expenditure involved. Considerable progress has been made but the demand for the tuberculin test of cattle under our different policies is greater than can be met promptly and delays occur which cannot be avoided.

Accredited Herds.—There are now four thousand and eleven (4,011) fully accredited herds in Canada. Two thousand and ninety seven (2,097) herds are undergoing accreditation and one hundred and twenty six (126) are awaiting test.

Supervised Herds.—There are eleven hundred and twenty-five (1,125) herds tested under this plan. When a restricted area is established the herds under this plan within the area are automatically absorbed under the restricted area plan. Stockowners unable to take advantage of the accredited herd plan can have their herds tested under the supervised herd plan but no compensation is paid for reacting cattle.

Municipal Tuberculosis Order.—No new municipalities have been accepted under this order since October, 1923, and one municipality has been included in a restricted area. Supervision is still maintained over the herds supplying milk to twenty-nine municipalities.

Restricted Areas.—The testing of all cattle in areas established for the eradication of bovine tuberculosis continues to gain favour with cattle owners. The risk of infection from neighbours' cattle is practically removed. Tuberculosis free herds are protected from infection as infected herds are cleaned up and are no longer a source of danger. No cattle except those for immediate slaughter are allowed into a restricted area unless they are accompanied by a satisfactory tuberculin test chart.

The new areas tested during the year are as follows:—

The File Hills Indian reservation in Saskatchewan. In this small area 311 cattle were tested and 23 reactors removed.

The counties of Missisquoi, Iberville and Brome have been completed, approximately 67,000 cattle were tested with 19·8 per cent of reactors.

The counties of Shefford, Rouville and portions of the counties of Sherbrooke and Stanstead have been completed. In this territory approximately 59,000 cattle were tested with 19·5 per cent of reactors.

The second general test of the Huntingdon Extension area has been commenced and all cattle in Richelieu county, west of the Richelieu river, and those in the county of Vercheres have been retested.

The third general test of the Huntingdon area, including the counties of Huntingdon, Chateauguay, Beauharnois, was commenced February 21, 1929, and is now under way.

All cattle (20,644) in Prince Edward county in Ontario have been retested and the infection which was 2·1 per cent at the initial test has now been reduced to 0·47 per cent.

The third general test of the Huntingdon area, including the counties of also been completed. Infection in this area has been reduced from 7·9 per cent at the first test to 0·71 per cent. The number of cattle in this area is 46,480.

In the Nova Scotia area, which included the whole province except Cape Breton, the retest of all infected herds is being carried out.

Infectious Abortion of Cattle.—Arrangements have been made to co-operate with cattle owners in eradicating infectious abortion from their herds of cattle. Specimens of blood are taken by the owner's veterinarian and laboratory tests are conducted by this department to determine infected animals. It is required, however, that no cattle which react to these tests may be sold except for slaughter unless the purchaser is aware that the animal is an abortion reactor.

Infection of Stock Cars and Yards.—The cleansing and disinfection of all stockyards and stock cars are carried out as routine measures. Stock car Inspectors are maintained at thirty-one railway centres and all stock cars arriving at or passing through these points are disinfected unless they show evidence of having been so treated. Cars which have conveyed hides, wool, or other products under restrictions are also cleaned and disinfected before being used for any other purpose. All the work is carried out under the supervision of our officers and only approved disinfectants in proper strength of solution are used.

Pathological Division

Animal Diseases Research Institute

This new Institute, with its modern equipment and greatly improved facilities for research purposes, provides the base and centre for a continuous and intensive attack on animal disease problems and, through experimental studies and research, the means of further developing scientific and efficient methods for the control or elimination of preventable disease.

In all classes of live stock and poultry and in fur-bearing animals, health and disease problems are more or less inter-related, in some cases very intimately; and, regardless of the particular species of animal concerned, from a research viewpoint come within the vast scope of comparative pathology. Certain diseases and abnormal conditions are common to many different species of animals and birds, others are more selective and affect but one or several distinct species; but the transmissibility of infections, viruses and parasites, from one species to another, from animal to man, and from birds and poultry to animals, occurs frequently and is a factor of great importance.

Knowledge gained in the study of a particular disease in man, animals, or birds invariably finds its application in the study of some other disease and investigation; and it is through the work of those specializing in bacteriology, in

parasitology, bio-chemistry, serology, immunity, or in one or other of the sciences allied to comparative pathology, that an intensive and complete study can be made of the major problems in animal and poultry disease. The Research Institute is organized for such a purpose and has the great advantage of bringing together at one time in one place and in one institution a group of specialists and experts. With such opportunities and facilities for conducting research it is possible to make a combined and comprehensive attack upon the various phases of a single problem, to apply the minds and co-operative effort of trained and highly qualified workers to the best advantage, and to avoid unnecessary duplication and the waste of time and labour.

During the past year substantial and satisfactory progress has been made in a number of researches carried on from previous years; some new researches, for which there is a continually increasing demand, have been undertaken and our activities are being extended as far as is possible with the number of workers engaged.

TUBERCULOSIS

Tuberculosis, in its various phases and in its relationship to man, animal, birds and poultry, presents multiple problems for study and an unlimited field of research.

Among the more important researches undertaken by the Pathological Division are the following:—

Vaccination against tuberculosis, with especial reference to the Calmette method (B.C.G.)
Natural and acquired resistance to tuberculosis.
Hereditary factors in tuberculosis.
Sources of infection.
Herd epidemiology and transmissibility of infection.
Biology and adaptation of tubercle bacilli.
Tuberculin and its derivatives.
Avian tuberculosis.

"B.C.G." Vaccination.—Experimental vaccination of cattle by the B.C.G. method, as conducted by the Department of Agriculture, over a period of four years and up to the present time has given unfavourable results. In some cases in very young animals, B.C.G. vaccination may tend to increase resistance to a limited degree, but the great majority of our animals, two years after vaccination and exposure to natural infection, showed stages of progressive tuberculosis. The resistance afforded by B.C.G. vaccination is transient and insufficient. As the vaccinated animals advance to sexual maturity the percentage in which tuberculosis is manifested increases. The results of experimental vaccination, as reported from other countries, are somewhat conflicting, but on the whole disappointing and indicate that B.C.G. vaccination is of little or no value in the practical eradication of tuberculosis. The question of vaccination, however, is a prominent one and of world-wide interest. It is under the consideration of the Health Section of the League of Nations who have appointed a committee of experts to study the entire question of B.C.G. vaccination in man and in animals. This committee has recommended a plan of experimentation for a period of six years at the end of which it is hoped definite conclusions may be drawn with regard to the safety, value and efficiency of the vaccine. Our experiments in this connection are continuing. Two interim reports have been issued and further reports will be made in due course.

Bovine Subcutaneous Tuberculosis.—A valuable study of tuberculosis of the skin as it occurs in cattle has been completed and a report published.

Tuberculosis in the Common Crow.—The discovery and a study of tuberculosis in crows has been made at the Research Institute, and is a valuable contribution to the knowledge of avian tuberculosis.

Tuberculin.—Progress has been made in the bio-chemical study of this important product. The object is to prepare and extract the active principle in as pure a form as possible. Nearly two million test doses of tuberculin have been issued from the laboratory during the year.

CO-OPERATION WITH THE NATIONAL RESEARCH COUNCIL

The Federal Department of Agriculture is co-operating with the National Research Council through its Associate Committee on Tuberculosis Research, and is responsible for a large proportion of the work recommended by that committee.

The third meeting of the associate committee took place in Ottawa on December 13 and 14, 1928, one important session being held at the Animal Diseases Research Institute, Hull. Calmette's method of anti-tuberculosis vaccination (B.C.G. vaccination) was the main subject for report and discussion. The chief pathologist reported on the experiments conducted by the Department of Agriculture since 1924 and presented to the committee the post-mortem evidence in a number of young B.C.G. vaccinated cattle.

A tuberculosis exhibit, prepared especially for this meeting, created a great interest among the members of the medical and veterinary professions.

INFECTIOUS BOVINE ABORTION

Infectious abortion, with the disorders which accompany or arise from this infection, causes heavy loss to the cattle traders and dairymen and from an economic viewpoint is of no less importance than tuberculosis. Moreover, the increasing incidence of "Undulant Fever" in man, which, in many cases has been found to be of bovine origin and due to the same bacillus causing abortion in cattle, is significant, and points to the necessity of controlling and suppressing this infection in cattle and other animals. Considerable research has been undertaken and is making good progress. In the meantime, plans for the building up of herds free from abortion have been formulated and are under trial. Herd owners, willing to comply to certain conditions and restrictions, may have their cattle tested, and are making application in increasing numbers. At each of the Pathological Division laboratories serological tests for abortion are conducted; 4,475 tests were made during the year, and the results indicated abortion infection in over 20 per cent of the cattle tested.

RABIES

Laboratory examinations for rabies have increased in number, one hundred and forty heads have been received and in 68 of these (43 dogs, 17 cattle, 5 sheep) a diagnosis of rabies was made by microscopical examination.

BACILLARY WHITE DIARRHOEA OF POULTRY

Approximately 10,000 laboratory tests for bacillary white diarrhœa infection (S. Pullorum) have been made. There is no doubt that with the aid of the serum test, and the elimination of the infected birds, flocks can be maintained relatively free from the disease, and the mortality in baby chicks greatly reduced.

ANIMAL PARISITES

Parasitic infestations are receiving special attention. As a rule, young animals, especially lambs, young pigs, fox puppies and chickens suffer most from worm invasions. Round worms, tape worms, hook worms and lung worms do the most damage. A protozoan parasite causing coccidiosis in chickens is a serious menace to poultry flocks. Our experiments have shown that through the use of impervious flooring parasitic infestations may be reduced to a minimum and kept well under control. Concrete flooring is advised for pig-pens and fox-pens, particularly for the breeding females and the new-born offspring. The eggs of the most of the troublesome parasites are hatched in the ground soil; the use of impervious flooring prevents this and, with proper cleansing and sanitation, affords the most efficient and economical means of prevention.

GENERAL AND MISCELLANEOUS LABORATORY SERVICES

Examinations of samples collected by the Meat and Canned Foods Division, of pathological specimens and material for disease diagnosis, the presence and identification of animal parasites, and other laboratory services are conducted at each laboratory of the Division. Every year sees a greater demand for these services. The total number of specimens and samples received at the laboratories during the year amounts to 17,172.

Meat and Canned Foods Division

During the fiscal year just closed, there was a decrease in the total number of animals slaughtered in establishments under inspection of approximately 135,000. While the number of sheep slaughtered showed a slight increase, the decrease was in the number of cattle and hogs slaughtered, particularly the latter.

This is no doubt accounted for to some extent by the high prices of feeds and the unsatisfactory condition of the British bacon market.

The prices paid to producers in Canada by the packers was such that export was curtailed to a very great extent, as it could not be continued with any profit to the shipper. Beef prices were reasonably well maintained and there appears to be a growing demand on the part of the purchasing public for some action in order that they may be reasonably assured that the beef purchased will be of the quality desired.

High class beef has and will always bring a satisfactory price and it would appear that if its consumption is to be increased, encouragement must be given to the production of the highest quality.

The consumption of mutton and lamb in Canada is increasing and is undoubtedly based upon the product which has materially improved during the last few years.

The export of Canadian bacon to the United States is satisfactory and shows every prospect of increasing.

The establishments operating under the Meat and Canned Foods Act have been maintained in splendid condition. The good feeling which exists between the staff and the managements has been maintained. The number of establishments do not vary to any extent from year to year but show a steady growth which is in keeping with the development of the live stock industry and the increase in population.

It was deemed advisable to transfer the administration of the Regulations Governing the Inspection of Preserved Fruits and Vegetables to the Fruit Branch,

and the Regulations Governing the Inspection of Preserved and Evaporated Milk to the Dairy Commissioner. This was carried out early in January.

Complete statistics, with a detailed report of the work of the three divisions of the Health of Animals Branch, are outlined in the Annual Report of the Veterinary Director General.

LIVE STOCK BRANCH

Horse Division

During the fiscal year just closed the horse market has been quite active, the demand being considerably keener than during the previous year and which demand has continued to increase for the first six months of this year. During the calendar year 1928, Ontario bought upwards of 10,000 horses from the western provinces, while Quebec took 12,000 and the Maritime Provinces approximately 3,000, making a total of 25,000 for the year. This has resulted in considerable activity as regards horse breeding in the five eastern provinces with the result that there are more colts in the country this spring than at any time for the last half dozen years. The inauguration of a Federal-Provincial Policy in aid of Horse Breeding, between each of the eastern provinces and the Live Stock Branch, by which a grant on a fifty-fifty basis is paid by the Live Stock Branch and each province, to the owners of stallions that pass inspection and that comply with certain requirements, has also done much to encourage the eastern farmers to raise more horses.

The breeding of saddlers, hunters and horses of that type, also polo ponies is yearly receiving more attention, due to the steady demand at good prices for horses of this type. The breeding of good, big hunters, gives the farmers more than one market as a hunter also makes a police, fire, or remount horse. He is also a splendid delivery horse and likewise useful for farm work.

Transportation companies complain of a shortage of draughters, 1,700 pounds and upwards, for which kind they are ever ready to pay high prices. There has also been a good trade in the other types for city and lumber woods use. The demand for the various types of horses mentioned above bids fair to be greater in the year 1929, as evidenced by the fact that over 20,000 western horses have been absorbed by the eastern markets during the first six months of the year in addition to some thousands that have changed hands and that were bred in the east.

CLUBS

Horse Clubs are now confined entirely to the Prairie Provinces. The number last year was slightly larger than previously. Accordingly there was a keen demand for good stallions. The Club Policy in addition to paying one-third of the service fees also protects the breeders in that through careful inspection by officers of this department, only good specimens that are free from hereditary unsoundness can be hired by clubs. Thus a member knows that the club stallion he is using is sound, and of good conformation and likely to improve his horse stock. Another feature of the policy is that a district has to continue from year to year to use the same breed of stallion. Accordingly in a few years a distinct type of horse is common in the district which makes for improvement. The policy, however, is not one sided as it has proven of undoubted benefit to the stallion owners. In the first place a club must guarantee the owner a definite number of mares; secondly it must pay him one-third of the service fees at the end of the service season without any trouble to himself in the way of collecting; and thirdly, the club must pay the remaining two-thirds of the service fees on every mare that is in foal. Thus the stallion owner is assured of a fair return

on his investment and sufficient money at the end of the service season to meet current expenses. In this way the owner of a good horse is encouraged and protected. This scheme has proven particularly popular in the Prairie Provinces, where the farmers have learned the value of co-operation amongst themselves.

BREEDING STATIONS

During the year the various breeding stations carried on successfully. In the aggregate more mares were bred than any previous year. The steady demand for hunters, saddlers, police, remount and light delivery horses has made the big thoroughbred sire a most popular horse. The chief difficulty in extending the work at the present time, is due to the fact that there is only a limited number of these stallions of the cross-country hunter type in the country and also to the prices at which such stallions are held in Great Britain where the Hunter Society and the War Office are, between them, awarding a premium to all suitable horses, while in the Irish Free State the Government is encouraging the use of the hunter thoroughbred in the production of the world famous Irish hunter horse. Canadians from time to time import a few Irish hunters owing to the scarcity of this type in Canada, although the Canadian breeder can and has raised some equally good horses. The difficulty has been that the demand far exceeds the supply; in fact breeding station districts have been combed over to such an extent that there is scarcely a suitable hunter prospect available and unfortunately the majority of the good young mares have been sold owing to the high prices the buyers were willing to pay. In one station district, eleven colts composed of a couple of yearlings and as many three-year-olds, the balance being two-year-olds, brought $3,750. These colts had no schooling other than being trained to lead. In another case an American buyer paid an average of over $300 per head for 52 yearlings, two-year-olds and three-year-olds. With these prices common it is quite easy to understand why the breeder is tempted to sell and also why the breeding of horses of the hunter type is gradually growing in popularity.

THE HUNTER, SADDLE AND LIGHT HORSE IMPROVEMENT SOCIETY

This society was organized about three years ago and has since devoted its attention to the breeding and improvement of the hunter horse particularly and has opened a Stud Book for the registration of foundation mares and already in the neighbourhood of some eight hundred have been enrolled. The headquarters are in Toronto but branches have been formed in the western provinces and it stands ready to help in any or all provinces just as soon as the breeders of a province are willing to join in the work. Aided by this department and the Department of Agriculture of the province of Ontario, through a grant for expenses, the society imported some six good, big thoroughbreds of the right type, last winter. These have been disposed of and are standing for service in the province under a guarantee that they must be properly taken care of and cannot be sold out of the country. The society is also doing work in the way of encouraging the breeding and showing of suitable young horses, by offering prizes at various fairs in districts where the number of colts of the right type warrant. This department in addition to the yearly grant also aids the society in its work by furnishing one inspector to work with any provincial inspector when examining foundation mares for the Stud Book. The Hunter Society has done much useful work in interesting horse lovers throughout the country and in helping advertise the possibilities in breeding this type of horse.

FEDERAL-PROVINCIAL ASSISTANCE TO HORSE BREEDING

The provinces of Ontario, Quebec, New Brunswick, Nova Scotia and Prince Edward Island have each joined with the federal Live Stock Branch in making a grant to owners of sound, individually excellent stallions that possess size, quality and conformation. All such stallions are inspected by a board composed of federal and provincial inspectors and the grant is awarded according to the number of mares left in foal, but in no case exceeds $300 per horse. Fifty per cent of each grant is paid by the federal Live Stock Branch and fifty per cent by the province in question. Already this scheme is meeting with considerable success.

FUR FARMING

During the year there has been a considerable increase in the number of fur farms. At the present time in addition to silver fox ranching, the raising of blue foxes, particularly in British Columbia, is spreading rapidly. The blue fox is prolific, litters of eight and ten being common, to which should be added the fact that the pelt is quite fashionable and as high as $225 has been paid for a good skin.

Mink.—Mink farming, owing to the high prices for the skins, is increasing very rapidly. It has also had the effect of creating a splendid home market for good animals for breeding purposes while the foreign market takes all the surplus, in fact the demand both at home and abroad is greater than the supply. Two hundred and fifty dollars is now a common price for a good pair of mink and even three hundred has been paid. This is not excessive when it is borne in mind that a single pelt in the Montreal market has brought as high as $72 while $117 was paid last winter at the New York sale. Mink thrive well in captivity and give comparatively speaking a minimum amount of trouble.

Muskrat.—Muskrat raising, particularly by fencing in a small lake surrounded by marsh land, well stocked with such plants as water lillies, flags, wild rice and cattails, is becoming common. It has also been found that muskrat can be raised satisfactorily on dry land. Owing to the fact that they raise three large litters a year, they multiply very rapidly and bring good returns on investment. There is always a market for the fur and also a good demand for breeders at fair prices. A thousand muskrats were sent in one shipment from Manitoba to Germany in the fall of 1928, while smaller shipments went to other countries.

Marten.—Marten, owing to the difficulty of securing animals for breeding purposes and also to the fact that they do not seem to take so kindly to domestic conditions as the mink, are as yet not being raised in numbers. During the last couple of years, however, a certain measure of success has been achieved and it will be undoubtedly only a matter of time until these beautiful fur bearers will be raised just as mink are.

Other Fur Bearers.—Fisher, skunk, raccoon, badger and even coyotes have been successfully raised under ranch conditions and the number of breeders is increasing yearly. The Canadian climate is particularly suitable for fur raising. This coupled with the great demand and the high prices of furs bids fair to make the raising of fur bearers under ranch conditions general and profitable throughout Canada.

CATTLE DIVISION

GRADING AND BRANDING OF BEEF FOR THE DOMESTIC MARKET

As was indicated in last year's report, a National Beef Cattle Conference was called by the department at Winnipeg in June, 1928. At this conference, producers' organizations, Dominion and provincial Departments of Agriculture,

the packing industry and the retail meat trade were represented. The conference recorded its approval of the principle of grading and branding of beef for the information of the consuming public and recommended that the system be inaugurated on a voluntary basis and that it be limited at the outset to beef which had been federally inspected from the health standpoint. It was further recommended that the packers should be responsible for the grading under regulations provided and under the supervision of the Dominion Department of Agriculture.

A Joint Beef Committee was named to deal with matters of detail in the inauguration of the grading service to promote the production of desired weights of finished cattle under the varied conditions of production obtaining in Canada and to organize a program of advertising, lectures, demonstrations, etc., to interest consumers in the graded product.

Effect has now been given to the recommendations of the conference and of the Joint Beef Committee by the passing of the necessary regulations under the Live Stock and Live Stock Products Act and by providing for the establishment of the necessary inspection service. The larger packing concerns have indicated their willingness to undertake the branding of beef graded according to the department's specifications and it is expected that during the fall months of 1929, Canadian consumers will for the first time be able to purchase beef which will carry on every important cut a stamp of approval as to its eating quality.

Only the best quality beef will be branded and it will be sold under two grades, "Choice" and "Good." The grade "Choice" will always be designated by a red brand in the form of a ribbon-like mark running from end to end of the carcass. This grade will necessarily be limited in volume and will represent the product of particularly high class, well finished cattle. The grade "Good" will be marked similarly to the "Choice" grade except that the colour of the brand will be blue instead of red. This grade will be in greatest supply and will include only beef which can safely be recommended as of good eating quality. Establishments will be permitted to sell these grades under their own trade brands but the brands of all establishments must be imprinted in red for the grade "Choice" and in blue for the grade "Good."

The immediate effect of the service will be to give to the product of well bred, properly finished young cattle the recognition which it has long deserved in the domestic retail meat trade. There is no question that the opportunity to purchase beef with some assurance that it will be of the quality expected will be welcomed by a large percentage of Canadian purchasers.

If, however, beef grading is to be of full benefit to the producer, the supply of the right kind of cattle to meet the requirements of our home market must keep pace with the demand for graded beef. The light weight carcass weighing within a range of 450 to 550 pounds but preferably under 500 pounds is the one which finds the most ready sale in the Canadian trade to-day. While beef grading may possibly help to develop a keener appreciation among consumers of the superior flavour of the heavier carcass from the more mature animal, the widest demand for some time will undoubtedly be for the product of animals weighing not over 1,050 pounds at the time of slaughter.

To take full advantage of this outlet, cattle must naturally be finished as yearlings. This does not imply baby beef production as ordinarily understood, but does imply carrying the young animal forward to the finished stage without allowing loss of natural flesh at any stage of its development. Through producers' organizations and provincial Departments of Agriculture, steps are being undertaken to organize beef production campaigns throughout the country in which will be emphasized the importance to producers of studying carefully how they may most economically convert their practice to one of feeding out a larger percentage of breedy young cattle as yearlings. To the degree to which

this can be successfully accomplished, producers will improve their position in finding the broadest outlet for their finished product not only in the domestic but also in export markets.

BOYS' CATTLE BREEDING CLUB POLICY

Ever since the inception of this policy in 1921 the work associated therewith has shown persistent growth and expansion. This work is at present conducted in conjunction with the provincial departments of the five eastern provinces. Other provinces, however, are becoming interested and the spread of the movement to new territories may be confidently expected.

Experience with club work has demonstrated that the average club member rapidly arrives at a stage where a capacity is revealed for enterprises beyond the scope of ordinary club activities. The valuable training and experience which the boys secure in the feeding, showing and judging of live stock, in financing and business methods, in the keeping of accurate records of feed costs and production, and, by no means of least importance, the developing of the boy himself, awaken ambitions which demand new spheres of action. These aspirations have found expression in various directions—herds have been materially increased, where in many cases the club heifers marked the introduction of pure-bred cattle into a district that district has since established a reputation as a centre for a particular breed, trade in pure-bred cattle has been greatly stimulated, Record of Performance, Cow Testing, Accreditation and similar advanced movements have been readily adopted, and, in short, more scientific methods of agriculture have been universally employed and farm life in general has been elevated to a much higher plane.

In addition to the local club competitions and the special classes at the provincial fairs which have meant so much in every way to the young contestants, the Canadian National Railway last year furnished to winning teams of Breeding Club and Calf Feeding Club members from each province a free trip to the Royal Agricultural Winter Fair, where judging competitions were held and appropriate prizes awarded. As a climax to the club work of the season, this proved to be a most eventful experience to the competing teams, which comprised both boys and girls.

CALF FEEDING CLUB POLICY

In the seven years that this policy has been in effect it has grown rapidly in popularity. During that period it has received the enthusiastic support of the provincial departments which participate with the federal department in conducting the work on a joint basis. It has also established itself firmly in the regard of those directly connected with its operation as a valuable instrument for kindling interest in, and implanting knowledge of, the fundamental principles of correct cattle feeding and management.

The growth of the policy is indicated by the fact that in the province of Quebec alone seventy-six Calf Feeding Competitions were held last year at which 2,157 calves were exhibited by the young competitors who had fed and cared for them during the period of the contest. An attendance estimated at 14,000 suggests not only the keen interest taken in these events, but also the far-reaching influence of the work upon communities in which clubs have been located. This year it is anticipated that upwards of 100 clubs will be operated in Quebec and 65 in the Maritime provinces.

In addition to the more direct benefits which the club members derive in the way of financial rewards, knowledge of the various phases of live stock husbandry, fitting and showing, etc., the members soon display a desire and capacity for extending their interests and energies to more advanced activities. Consequently, in order to keep pace with this devolpment and demand, it has been necessary from time to time to enlarge the scope of the policy. As at present

constituted, the policy provides for continuing a club for three years, the original calf being supplemented each year by a calf of the current season, and classes for the various ages included in the prize list. It is further provided that where Cow Testing Associations embracing all the herds in the club are organized, a competition will be held the fourth year. It is also the intention to graduate clubs which have shown proper interest and progress into Boys' Cattle Breeding Clubs and thus afford the members an opportunity to capitalize and apply to the raising of pure-bred stock the knowledge and experience they have acquired in Calf Feeding Club work.

ADVANCED REGISTRATION OF DAIRY BULLS

Since this service was established in the spring of 1925, Certificates of Advanced Registration have been issued for upwards of 1,000 bulls. While this number may not seem large in relation to the total number of pure bred bulls annually produced, it should be remembered that only bulls which have R.O.P. credentials on both sides of their ancestry are eligible and that a bull must pass a rigid inspection as regards type before being admitted.

Five breed associations contribute to the support of the system as carried on by the Dairy Cattle Committee—Ayrshire, Jersey, Guernsey, French Canadian and Red Poll. A similar system is administered by the Holstein-Friesian Association of Canada through its own office.

The chief value to the industry of Advanced Registration lies in the effective manner in which it focusses the attention of dairymen upon the importance of combining desirable type with recognized production credentials in the sires used in commercial as well as in pure-bred herds. The effect on the quality and productive capacity of herds into which such bulls have been introduced is already becoming apparent.

In the four years since the system was organized it has been demonstrated that large breeders as well as small take pride in having A.R. sires at the head of their herds. In facilitating the sale of young bulls, Advanced Registration has proved of special benefit to small breeders. They, as well as large breeders, have capitalized the assurance of satisfaction inspired by Advanced Registration credentials to good advantage in increasing their mail order business. At the same tme, buyers have been saved the expense of personally inspecting a number of bulls before making a selection and have therefor been better able to afford the price of a worthwhile sire.

RECORD OF PERFORMANCE FOR PURE-BRED DAIRY CATTLE

The Record of Performance continues to fulfill its object, which is to provide reliable information to dairy farmers as to where they can obtain stock from high producing ancestry and thereby improve the production of their herds.

The animals exhibited in Record of Performance classes at all the leading exhibitions prove that high production and superior conformation can be combined. Before the inauguration of these classes, breeders of dairy herds were frequently very much disappointed in the progeny of animals which had won high awards at exhibitions.

Owing to the improved testing quality of their cows, two of the breed associations have this year raised the butterfat standard for qualification in the Record of Performance. As the payment of milk by test is becoming more and more general, the raising of a breed standard is a very good indication of the improvement which has been brought about solely by testing.

During the past year applications for entry in the Record of Performance of 8,879 cows have been accepted. This is an increase of 872 over any previous year.

COWS ENTERED FROM APRIL 1, 1928, TO MARCH 31, 1929

Ayrshire	2,557
Brown Swiss	11
French Canadian	423
Guernsey	356
Holstein	3,479
Jersey	1,560
Red Poll	75
Shorthorn	418
	8,879

NUMBER OF RECORD OF PERFORMANCE CERTIFICATES ISSUED DURING THE PAST YEAR

	Cows	Bulls
Ayrshire	814	39
Brown Swiss	7	.....
French Canadian	140	6
Guernsey	135	7
Holstein	999	68
Jersey	536	14
Red Poll	34	.....
Shorthorn	190	7
	2,855	141

TOTAL NUMBER OF CERTIFICATES ISSUED SINCE THE COMMENCEMENT OF THE RECORD OF PERFORMANCE

	Cows	Bulls
Ayrshire	6,386	303
Brown Swiss	21	2
French Canadian	768	34
Guernsey	714	30
Holstein	8,617	448
Jersey	4,233	169
Red Poll	182	4
Shorthorn	1,879	59
	22,800	1,049

COW TESTING SERVICE

A system of recording the production of grade dairy herds has been operating for three years and has continued to expand during this period, particularly in the past year as herdowners became better acquainted with the details of the work.

In the year 1926, the first season the present plan of Cow Testing was in operation, 1,195 herds were enrolled and 12,142 cows were recorded. For the season of 1928, there was a marked increase in entries with 1,869 herds and 17,790 cows under test.

In addition, there has been a revival of interest amongst the members of Cow Testing Associations with regard to breeding and feeding problems. There is a continuous demand from association members for bulls and heifers from sires and dams of known production. Unprofitable cows, pointed out by their low records of milk and butterfat, are being discarded, while rations and crops are receiving more consideration. These activities have been stimulated through the work of recording and testing.

The service is provided by the Branch in six provinces of the Dominion, namely, Alberta, Manitoba, Quebec, New Brunswick, Nova Scotia and Prince Edward Island. The distribution and extent of the work for the year 1928 is indicated in the following summary:—

Province	Associations	Herds	Cows
Alberta	9	85	828
Manitoba	7	105	1,090
Quebec	81	870	9,423
New Brunswick	25	266	2,472
Nova Scotia	45	493	3,628
Prince Edward Island	5	50	349
	172	1,869	17,790

COW TESTING REGISTER

The Cow Testing Register is a special feature of the Cow Testing Policy introduced in 1926 and is available to a limited number of herdowners in districts in which Cow Testing Associations are organized. The supervision of the details of recording, sampling and testing is sufficiently close to warrant the issuing of a production certificate to any cow which reaches a standard of 6,000 pounds milk and 300 pounds butterfat in twelve consecutive months.

From a total of 140 cows entered during 1928, 42 cows have been issued certificates to March 31, 1929. Sixteen cows have won two certificates each, having produced the qualifying amount of milk and butterfat in each of two herd years and three cows have been awarded three certificates.

Sheep and Swine Division

SHEEP

The year 1928 saw a further expansion of the sheep industry throughout the Dominion. In Eastern Canada there was a good lamb crop, and with a season that was cool with plenty of moisture, the lambs grew rapidly, finishing at ideal market weights.

The western provinces were not in such a favourable position from the standpoint of a large lamb crop. Extreme weather conditions the previous fall resulted in a large percentage of dry ewes. Ranchers suffered further losses of considerable proportions as a result of cold rains during the early part of the shearing season. The lamb crop that was turned out on the range did exceptionally well during the summer months as there was plenty of moisture and range pastures were probably the best for many years. Domestic flocks in the hands of farmers throughout the western provinces gave good results, and the lambs went to market with plenty of development and the usual amount of finish.

The growing tourist trade in the Maritime provinces, Quebec, Ontario, Alberta and British Columbia again created a wider outlet for early lambs. Sheep raisers are more and more coming to realize the advantages of catering to tourist resorts, and the local consumption of lamb is increasing on that account.

Lamb prices throughout the main part of the marketing season were maintained on a very similar basis to the previous year, most farmers realizing in the vicinity of ten cents per pound or better for their lambs.

The wool market showed considerable improvement over the previous year. Local prices for ungraded wool ranged from 25 per cent to 30 per cent per pound, graded wool bringing more money. As the wool marketing season advanced, the demand for wools diminished and prices were somewhat easier. The wool clip was of a particularly fine quality.

The demand for pure-bred sheep was again brisk. American buyers were in the field early and continued to buy extensively well into the fall months. A shipment of rams was also made from Nova Scotia to Newfoundland. Sheep Sales held throughout the Dominion were generally successful and prices obtained for both grade and pure bred stock were satisfactory to those who made consignments. Many new sheep flocks have been established during the year and prices for breeding stock indicate that there is general confidence in sheep raising.

SHEEP FAIRS AND LAMB SALES

The Sheep Fair and Lamb Sale is now recognized as an essential factor in organizing sheep-producing centres. The value of these fairs and sales from the standpoint of encouraging co-operative marketing is becoming more apparent each year. They encourage the production of quality lambs, they have a pronounced educational value from the standpoint of educating the farmers to the exact market requirements in lambs, they reduce marketing expenses, encourage competition and insure full market value for quality product.

The organization of these fairs and sales is being gradually put on a more permanent basis each year. Penning accommodation is being provided and where the fairs are held in conjunction with the county Fair more adequate and modern pens are being provided.

The lambs are delivered to the fair grounds before ten o'clock on the morning of the fair. Each farmer's lot is weighed as it arrives, the lambs being graded according to weight and as far as possible according to finish. Entries are made in groups of five or groups of ten. The judging is performed on the basis of correct market weights, uniformity, finish and type. The weighing of each group and the judging gives the various exhibitors an opportunity to study the good points and the poor points of the various entries. Further information regarding the judging may be obtained on request from the judges. The class for ram and progeny provides ample material for demonstrating the importance of prepotency in sires. Pure bred rams whose progeny stands high in the market classes are always keenly sought after as flock sires and in this way many useful rams which previously went for slaughter are now being retained for breeding purposes as long as they remain useful.

As soon as the judging is completed, the sales committee for each fair proceeds to sell the lambs. Many of the fairs have adopted the policy of selling by public auction to the highest bidder, a method which seems to give general satisfaction, as it permits of competitive bidding by both local and outside buyers. The lambs are sold according to grade, the No. 1 lambs being sold first, followed by No. 2 lambs and culls. It has been found most profitable to sort out the feeders and culls in order that they may be offered for sale to local buyers. The demand for choice ewe lambs for the establishment of new flocks is growing from year to year. The sales committees endeavour to ascertain the probable number of ewe lambs that is likely to be required for prospective buyers of breeding stock and these are sorted out as the lambs are delivered in the morning. Breeding stock is offered for sale in lots to suit prospective buyers. The selection of suitable ewe lambs for breeding purposes and the encouragement of their sale locally is perhaps one of the most valuable features of the lamb sale. Grants for the Sheep Fairs and Lamb Sales are provided by the

federal and provincial Departments of Agriculture. Each fair has the necessary organization which is assisted by the promotion staffs of the federal and provincial departments.

In 1928, 115 Sheep Fairs were held at which 37,074 lambs were sold. The lambs as marketed averaged between 80 and 90 pounds for the various provinces.

PURE-BRED RAM PREMIUM POLICY

No other one policy has exerted as much influence in popularizing the use of pure bred rams as has the Ram Premium Policy and this is particularly true in the province of Quebec. Since its inception in 1919, something over 12,200 rams have been purchased by farmers who had not previously used a pure bred ram. The usefulness of the policy, even at this date, is evidenced by the fact that in 1928, 1,544 second premiums were paid and 1,503 first premiums were accepted. The policy is now definitely responsible for the establishment of new sheep breeding centres each year. Such districts through the use of one breed of rams are making steady progress in the grading up of their ewe flocks. Market lambs are also showing greater uniformity from year to year.

The following tables show the extent to which the policy is applied in the various provinces and the number of rams of the various breeds for which application is made:—

RAM PREMIUM POLICY—FIRST PREMIUMS, 1928

Breed	Prince Edward Island	Nova Scotia	Quebec	Alberta	Total
Shropshire	14	20	365	12	411
Oxford	8	13	606	.....	627
Leicester	.....	.....	277	.....	277
Hampshire	.....	.....	174	.....	174
Cheviot	.....	.....	14	.....	14
Total	22	33	1,436	12	1,503

SECOND PREMIUMS ON RAMS BOUGHT IN 1927

Breed	Prince Edward Island	Nova Scotia	Quebec	Ontario	Total
Shropshire	9	31	345	35	420
Oxford	.....	6	588	51	645
Hampshire	.....	.....	202	.....	202
Leicester	.....	.....	221	10	231
Cotswold	.....	.....	11	.....	11
Lincoln	.....	.....	13	.....	13
Cheviot	.....	.....	22	.....	22
Total	9	37	1,402	96	1,544

BOYS' AND GIRLS' SHEEP CLUB POLICY

This policy, which was first approved in 1927, has been generally popular throughout the Dominion. During the first year 11 clubs were organized under this policy, and in 1928, 27 clubs were organized. Already well over 200 new flocks have been established, through the medium of this policy, on farms where sheep were not previously kept. Junior farmers and boys and girls who have established flocks under this policy are finding sheep raising very profitable and

the success which has already attended their efforts has done a great deal towards stimulating interest and establishing new flocks among neighbouring farmers.

The selection of a Sheep Club district usually rests with the district fieldman or the promoter, and the selection is usually based on his knowledge of the district, its adaptability to sheep raising and the aptitude of the farmers or young people towards live stock. As soon as ten or more junior farmers or boys and girls have been interested in the policy, the formation of a Sheep Club is assured. An organization meeting of all interested parties is called at which the club officers are selected and the breed question is settled as all the members must agree to raise the same breed of sheep. Club members have the co-operation of the Canadian banks in providing loans for the purchase of ewes or fencing, subject to the regulations of the policy, thus it at once becomes necessary to interest the local bank manager in the organization.

When the preliminary organization details have been attended to and the ewes have been bought and distributed to club members, they are given very close personal supervision for the first year after the flock is established. This includes direction during the breeding season, instruction in feeding and management during the winter months, care at lambing time, shearing demonstrations, docking and castrating demonstrations, dipping demonstrations, instruction and control of parasites and any other phase of the sheep industry which the new beginner should know in order to handle the flock carefully and get the best results.

RAM GRADING

The popularity of ram grading among pure-bred breeders appears to be increasing. There is also a growing appreciation of this service on the part of grade flock owners who have to buy their breeding rams by mail order. The grading of rams is now performed in eight out of the nine provinces. A total of 3,451 rams was graded in 1928.

WOOL GRADING

Centralized wool grading was carried on during the year at Weston, Carleton Place, Lennoxville, Fredericton, Truro, Charlottetown and at several points in Manitoulin island. Wool graders were provided to handle the co-operative consignments of wool shipped for co-operative sale. The volume of wool graded in 1928 was somewhat larger than that handled in 1927. Canadian wools continue to show improvement in their preparation for market, the fleeces being well rolled and tied and the clip as a whole showing a very small percentage of rejects or low grade wools. The wool clip was of a particularly fine quality. Western range wools were stronger of fibre and lighter of shrink than usual. Domestic wools, when graded, were attractive and attracted buyer's attention, not only from Canadian mills, but also from the United States and continental European buyers. The following table shows the amount of wool graded by provinces in 1928:—

WOOL GRADING

Province	Range	Western domestic	Eastern domestic	Total
British Columbia	134,845	210,494	.....	345,339
Alberta	972,021	318,308	.....	1,290,329
Manitoba and Saskatchewan	270,485	496,695	.....	767,180
Ontario	.....	.....	694,656	694,656
Quebec	.....	.....	75,488	75,488
New Brunswick	.....	.....	14,033	14,033
Nova Scotia	.....	.....	49,381	49,381
Prince Edward Island	.....	.....	35,733	35,733
Sundry	.....	.....	181,622	181,622
Total	1,377,351	1,025,497	1,050,913	3,453,761

ASSISTANCE TO FARMERS OR COMMUNITIES BUYING FIFTY OR MORE BREEDING EWES

This assistance has been very popular, particularly as it has been closely supervised by our Live Stock Branch promotional officers and the quality of ewes being sent forward to meet community requirements has been of a very satisfactory character. There appears to be a continued demand for breeding ewes and in view of the fact that both lamb and wool prices have been maintained on a satisfactory basis, there is every evidence that the sheep industry will continue to expand and that requirements under this service will in all probability be extended.

SWINE

Market conditions during the fiscal year just closed have been more favourable to hog raisers than those of the year previous. From a monthly average price of $9.94 for select hogs at Toronto, during March, 1928, prices showed a continuous and steady increase, reaching their peak in August, but dropping during the fall months to rise again during the last three months of the year as a result of lighter deliveries.

As was expected the extremely unsatisfactory relationship between feed and hog prices which prevailed during 1927-28, had its effect in curtailing breeding with the result that there were fewer hogs on hand to complete the year's marketings. The most noticeable reductions in marketings occurred in August when deliveries at stock yards and packing plants in Canada were 147,725 as compared with 199,481 in the same month of the previous year.

The industry did not enjoy the same wide export of live hogs as during the previous year, the numbers totalling only 23,263 head for the calendar year, as against 197,106 head in 1927. In fact the live movement was the smallest of any during the past six years. After April the demand for export hogs fell off to a meagre volume and undoubtedly this to some extent affected the price situation in Canada. The export of bacon was also very meagre, totalling somewhat over 41,000,000 pounds as against 58,000,000 pounds in 1927, and representing a quantity less than one-third of the volume exported four years ago. Similarly, there was a big decrease in the pork exports, the total being somewhat over 11,000,000 pounds as compared with 24,500,000 pounds in 1927.

This large reduction in exports really started in the previous year and is directly attributable to the unsatisfactory outlet for our products on the British market, owing to the increased supplies from other countries and to the very poor trading conditions there. Although this market improved somewhat during the summer months, the temporary shortage in our markets, with a similar condition existing in the United States, immediately placed live hog values at a point at which it was impossible to export except at a loss.

The most encouraging feature of the whole situation is the very clear evidence of our growing ability to take care of increasing supplies of pork products on the domestic market. This market is after all the most profitable one we have and with the rapid development which is taking place in every part of the country it is likely that we will continue to absorb at home increased quantities of pork and bacon from year to year. In the meantime European countries may find it unprofitable to continue to produce hogs in large quantities at prices which have prevailed for the past two years on the British market. In this event we might again find it possible to take advantage of the British market to dispose of a greater proportion of our surplus production in which event our production could be greatly increased with benefit to the industry and the country as a whole. The general acceptance of the national swine policy of bacon hog production by the farmers throughout the Dominion, and a faithful adherence to same, places this Dominion in the position of being able to take

advantage of any export outlet which may develop, and at the same time provide our Dominion market with a type of product which meets with general favour and tends to increase consumption.

HOG GRADING

The past year has been one of note in the history of the hog-grading policy in that a very definite attempt was made to give this policy a wider application. The Order in Council P.C. 1787 making it necessary for drovers to grade their hogs at country points, or in lieu of this, to mark each farmer's hogs in a shipment so that they are readily identifiable at the public stock yard or packing plant, was put into effect in Ontario in March, 1928.

This Order in Council was passed in the hope that it would meet the demand from farmers' organizations throughout the Dominion for making purchase of hogs on a graded basis more general in the country. A great deal of work was entailed in educating drovers to grade hogs properly and in checking up their grading at country marketing points. The application of the order was confined in the first instance to the province of Ontario, chiefly for the purpose of testing the soundness of this legislation from a practical and educational standpoint and to establish the legality of the new regulations. Furthermore, from the standpoint of administration, it was desirable that some experience be gained in the application of these regulations before making them applicable to the country as a whole. The Order in Council was generally accepted by drovers, shippers and all others interested in the province of Ontario, but as was expected some objection developed on the part of drovers and commission men and prosecutions had to be resorted to in an attempt to secure a uniform application of the regulations.

Having satisfied themselves that local grading or marking was practical and proved of immense educational value, the department decided to apply the new regulations throughout the Dominion. Before doing so, it was considered advisable to amend the regulations in such a manner as to strengthen the legal wording and provide for greater expediency in the matter of enforcement.

When this amendment was being made, it was also considered advisable to revise the hog grades in accordance with the recommendations of the Joint Swine Committee.

The general improvement in quality of Canadian hogs resulting from the application of the hog grading policy made it necessary to reconsider the whole matter of grades in relation to the value of carcasses from a standpoint of wholesaling and retailing bacon and pork products. It was found that the old thick smooth grade which constituted the major portion of our hogs at the commencement of hog grading had become inadequate, as there were very few hogs that corresponded to the original quality of this grade. The new grades, as recommended by the Joint Swine Committee, took into consideration the result of five years of improvement and provided for the necessary adjustment which gave effect from a selling standpoint to the improvement which has been brought about. It was also recognized that there are now sufficient hogs of bacon breeding to permit of two grades of bacon hogs, namely, the Select Bacon which corresponds to the original standard and Bacon hogs which are hogs of bacon breeding, but not of sufficient quality to go into the Select Bacon grade.

In view of the above it was considered advisable to make certain changes in the Hog Grading Regulations and Order in Council P.C. 328 was passed on the 11th day of March, 1929, rescinding all previous orders and establishing the Hog Grading Regulations on a new basis as regards grades and the liability of the shipper in regard to the grading of hogs at country points.

Some conception of the importance of this policy in effecting continued improvement in the quality of hog production can be gathered by a study of the following table:—

HOG GRADING AS SHOWN BY PERCENTAGES 1923-1928

Yards and Plants combined

Where graded		Select Bacon	Thick Smooths	Heavies	Extra Heavies	Shop Hogs
Alberta	1928	6·83	69·75	5·56	0·77	8·77
	1927	6·16	74·05	4·03	0·43	4·00
	1926	5·55	72·79	3·29	0·50	4·45
	1925	3·53	70·85	2·08	0·32	14·45
	1924	3·60	76·21	4·39	0·47	7·21
	1923	2·33	73·33	2·75	0·33	13·28
Saskatchewan	1928	4·50	61·21	6·54	1·86	9·56
	1927	5·35	67·50	6·05	1·52	4·05
	1926	4·95	69·71	6·56	2·14	2·11
	1925	5·04	59·02	3·89	1·15	16·96
	1924	3·99	59·05	6·01	1·43	14·26
	1923	4·10	69·45	7·28	2·13	18·09
Manitoba	1928	11·18	53·20	3·68	1·62	13·66
	1927	11·08	56·62	5·10	1·76	7·42
	1926	8·15	58·26	6·55	2·03	8·42
	1925	5·52	55·23	3·95	1·24	24·52
	1924	3·92	56·51	4·88	1·40	21·14
	1923	6·69	62·31	7·11	1·98	7·09
Ontario	1928	25·77	62·12	2·64	0·19	5·30
	1927	25·92	60·33	4·29	0·34	5·13
	1926	24·91	60·28	5·63	0·59	4·40
	1925	24·80	61·02	4·01	0·43	5·35
	1924	23·01	57·75	3·73	0·33	9·13
	1923	20·78	57·75	6·20	0·51	10·13
Quebec	1928	11·58	55·75	2·79	0·61	22·79
	1927	11·41	56·71	3·26	0·85	23·17
	1926	11·11	57·08	2·67	1·26	21·59
	1925	13·94	53·60	2·38	0·77	23·77
	1924	13·07	46·72	2·88	0·69	30·00
	1923	16·49	43·56	4·03	0·52	29·63
Nova Scotia, New Brunswick, Prince Edward Island	1928	37·10	35·44	4·45	0·88	16·36
	1927	37·88	42·24	3·33	0·53	13·11
Canada	1928	16·88	61·12	3·62	0·68	9·89
	1927	17·46	62·17	4·34	0·69	7·17
	1926	15·66	62·56	4·94	0·95	7·18
	1925	15·20	60·99	3·41	0·61	13·15
	1924	14·52	59·75	4·00	0·60	13·37
	1923	11·97	59·13	5·45	0·70	13·09

HOG GRADING AS SHOWN BY PERCENTAGES 1923-1928

Yards and Plants Combined

Where graded		Lights and Feeders	Roughs	No. 1 Sows	No. 2 Sows	Stags	Total Hogs
Alberta	1928	3·96	0·35	2·21	1·64	0·16	100
	1927	7·87	0·39	1·85	1·09	0·13	100
	1926	8·72	0·48	2·64	1·46	0·12	100
	1925	4·33	0·35	2·39	1·55	0·15	100
	1924	3·70	0·33	2·76	1·22	0·11	100
	1923	4·28	0·30	2·24	1·04	0·12	100
Saskatchewan	1928	9·30	0·32	4·00	2·21	0·50	100
	1927	9·20	0·37	4·14	1·45	0·37	100
	1926	7·40	0·31	4·60	1·95	0·27	100
	1925	8·69	0·32	3·11	1·53	0·29	100
	1924	6·90	0·28	5·39	2·43	0·26	100
	1923	3·00	0·35	3·67	1·62	0·31	100
Manitoba	1928	11·88	0·16	2·70	1·66	0·26	100
	1927	12·44	0·18	3·24	1·93	0·23	100
	1926	10·04	0·15	3·75	2·40	0·25	100
	1925	4·39	0·11	3·21	1·61	0·22	100
	1924	5·36	0·14	4·71	1·80	0·14	100
	1923	9·24	0·27	3·46	1·60	0·25	100
Ontario	1928	1·80	0·04	0·52	1·48	0·14	100
	1927	2·07	0·04	0·41	1·35	0·12	100
	1926	1·73	0·07	0·38	1·82	0·19	100
	1925	2·16	0·05	0·37	1·64	0·17	100
	1924	3·88	0·07	0·49	1·50	0·11	100
	1923	2·72	0·06	0·39	1·34	0·12	100
Quebec	1928	2·13	0·10	1·41	2·64	0·20	100
	1927	1·76	0·07	0·53	2·10	0·14	100
	1926	1·89	0·10	1·01	3·10	0·19	100
	1925	1·45	0·06	0·92	2·95	0·16	100
	1924	2·29	0·09	1·16	2·86	0·15	100
	1923	2·20	0·22	0·55	2·65	0·15	100
Nova Scotia, New Brunswick, Prince Edward Island	1928	0·06	0·01	4·84	0·58	0·28	100
	1927	0·82	0·00	0·85	1·15	0·09	100
Canada	1928	4·21	0·14	1·53	1·73	0·20	100
	1927	5·07	0·15	1·33	1·47	0·15	100
	1926	4·71	0·18	1·63	2·01	0·18	100
	1925	3·13	0·13	1·42	1·78	0·18	100
	1924	3·98	0·14	1·82	1·70	0·12	100
	1923	3·67	0·16	1·17	1·52	0·14	100

The above table shows the percentage of each grade of hogs for the past six calendar years in each province of the Dominion. Statistics now cover six years of operation under this policy and reveal a continued improvement in quality. Unfortunately, the actual improvement in quality cannot be presented by a statistical record as the average quality of hogs in the thick smooth grade is now very much higher than in 1923, the first year for which complete grading statistics are available.

BOYS' AND GIRLS' SWINE CLUBS

This policy, which has been in effect for eight years, continues to be one of the major factors in swine improvement work in the three maritime and in the four western provinces.

These clubs serve as a medium for the distribution each spring of large numbers of bacon type gilts. These gilts are retained and become brood sows on the farms on which they are placed. A further very important phase of this

work is the opportunity afforded each year for contact with a large number of farm boys and girls and their parents. This contact facilitates the spreading of information regarding proper feeding, use of dairy by-products, the growing of green feeds, proper housing, swine sanitation and intelligent marketing.

The improvement in the type of hogs marketed from Swine Club districts is the best testimonial for the effectiveness of this policy in laying the foundation for improved conditions as applied to both breeding and marketing practices.

The Judging Competitions which are part of each Swine Club Fair are a real feature, especially in recent years, when the high team from each province received free transportation from the Canadian National and Canadian Pacific Railways to the Central Judging Competition at the Royal Winter Fair, Toronto.

The assistance in organizing and directing Swine Clubs is taken care of by the agricultural representatives of the provincial departments. Supervision and personal contact are carried on co-operatively between officials of the Dominion Live Stock Branch and the provincial Departments of Agriculture, and the district in which the club is organized. The prize money for the Inter-Club Carlot Competition and the Inter-Club Judging Competition is provided by the Dominion Live Stock Branch.

There is a continued demand from each of the provinces for an expansion in Swine Club work. In 1927 the clubs organized totalled 130 while 132 were organized during the past year. Five clubs in Manitoba each produced a carload of hogs grading 100 per cent selects. The following table gives the number of clubs organized during the past year in each province:—

BOYS' AND GIRLS' SWINE CLUBS

Province	Number of Clubs
Nova Scotia	10
New Brunswick	35
Manitoba	30
Saskatchewan	20
Alberta	24
British Columbia	13

BACON HOG FAIRS

This policy is really a follow-up policy of the improvement work commenced with the Swine Clubs, and these Fairs are most numerous in the provinces of Quebec and Ontario where the work has been under way for a greater length of time.

In Quebec province, these fairs are held in conjunction with Bacon Hog Clubs which are authorized for districts where farmers' clubs have been organized and where approved boars are in use in each club district. Each Bacon Hog Club to qualify must market at least one carload of commercial hogs through its Bacon Hog Fair. In the provinces of Ontario and Prince Edward Island, fairs are organized in districts where it is considered necessary to revive interest in the keeping of bacon type hogs. A great advantage in this policy is that these fairs may be organized at different seasons of the year with a view to influencing a more even distribution of hog production and marketing throughout the year.

These fairs make provision for both market and breeding classes and the prizes are derived from equal grants from the Dominion and provincial Departments of Agriculture, supplemented by local contributions.

This policy tends to develop a community interest in hog production. In addition to featuring the production of market and breeding stock, they focus interest on prolificacy in brood sows, thrift and vigour in offspring, economy in production and ideal market weights and finish.

The following table indicates the number of fairs held in 1928, together with the number of hogs marketed and the grading of same:—

BACON HOG FAIRS

Province	Number of Fairs	Market classes	Number Selects	Per cent Selects
Quebec	54	4,563	921	20·88
Ontario	7	633	334	52·9
P.E.I.	4	288	171	59·37

PURE-BRED SOW CLUBS

This policy was first started in the province of Quebec in 1927 at the instance of the Quebec Swine Breeders' Association, for the specific purpose of increasing the supply of pure bred pig stock in the province.

Eight clubs were organized the first year and the Swine Breeders' Association, the provincial and the Dominion Departments of Agriculture contributed equally to the prize money for the Club Fairs which were held in the fall, when the sows and their progeny were exhibited.

Two more clubs have been added during the past year and there are plenty of indications that this work is likely to establish many new breeders throughout the province, some of whom will eventually play an important part in breeding and distributing pure-bred bacon hogs in the province.

The following table gives the location of the various sow clubs organized during the past year in the province of Quebec and shows the number of exhibitors, together with the numbers of hogs exhibited in the various classes:—

Club	Number exhibitors	Number aged sows	Number gilts	Number boars	Other hogs	Total hogs
L'Acadie	22	17	38	3	37	95
St. Alexandre	23	12	26	6	34	76
Berthier	16	19	26	13	11	61
Louiseville	11	9	19	7	32	67
Coaticook	17	17	37	7	11	72
Ste. Angèle & St. Octave	18	18	22	15	8	45
St. Charles	12	12	20	5	18	55
Plessisville	11	10	22	3	6	51
Ste. Monique	22	.....	.....	.....	22	22
St. Prime	20	.....	.....	.....	20	20
Total	172	114	210	59	199	564

ADVANCED REGISTRATION FOR PURE-BRED SWINE

As announced in the last annual report, an Advanced Registry Board for pure-bred swine to work with the officers of the department in developing an Advanced Registry Policy was set up and the recommendations of this board received the approval of the department. During the past year a Supervising Inspector of Advanced Registration was appointed but the season was too far advanced for the policy to be introduced and applied in a general way. It was possible, however, through the co-operation of the Experimental Farms system, to submit a number of litters from various farmers throughout Canada to a slaughter test, and the detailed information obtained from this work has been recorded and analyzed in accordance with the proposals suggested by the Advanced Registry Board. From the information thus obtained, it was possible

to perfect the proposals as outlined by the board and the rules and regulations covering this policy thus amended were made available to breeders of swine in Canada during the latter part of the last fiscal year, with the result of a fair response in the matter of entries from every province in the Dominion during the latter part of February and March. In the next annual report, it will be possible to present a summary of the results of the first year's actual work under this new policy.

According to the plan which is in operation at the present time, this work is to be carried on for an experimental period under the advice of the board which has been especially appointed by the department for this purpose. The department, in addition to providing the necessary staff to take care of this work, is providing for the payment of express charges on pigs sent to slaughter tests, the purchase of stationery and equipment and the salaries and travelling expenses of inspectors. It is proposed that these charges be kept at a nominal figure during the experimental stage of the policy, but the information thus obtained as to costs will prove of value in a further estimation of the practicability of this type of work.

BACON GRADING

In view of our diminishing export trade to Britain during the past two years which has been entirely due to a continued unfavourable price structure, the development of a bacon grading policy for export has been temporarily held in abeyance.

Steps were taken, however, during the past year to do a considerable amount of experimental work in rail grading and in comparing the results of such a grade with the live grading now in use. It was found that a very close similarity existed between the live grade and that obtained after the hogs were slaughtered.

In grading the hogs on the rail, a tentative schedule of carcass grades was used which corresponds to the amended live hog grades as passed by Order in Council this year. The results of the rail grading further emphasized the wisdom of this amendment in the live hog grades, in that a more accurate commercial classification has been adopted making it easier and more practical for buyer and seller to trade on the basis of the new grades.

Some of the information obtained in this rail grading work may prove of value at some later time in improving the grading services, when it is further supplemented by additional tests, however, for the present, it would seem that live grading is the most practical means of providing for the intelligent marketing of Canadian hogs.

SHEEP AND SWINE DEMONSTRATION WORK

The establishment of many new flocks of sheep on farms and ranches has developed a demand for a large amount of demonstration work at country points. While a great deal of the country has been covered in so far as demonstrations on dipping, docking and castrating as well as sheep shearing and the preparation of wool for market are concerned, there is still much of the country that requires instruction and advice on these matters. The cuts on undocked and uncastrated lambs which now apply at stock yard centres have resulted in many farmers attempting to castrate their lambs without expert advice and in a great many cases this has resulted in loss. In other cases farmers are diffident about performing these operations unless shown how and, in consequence thereof, there has been very little slackening off in the demand for these demonstration services.

The construction of hundreds of concrete dipping tanks has demonstrated that the permanent tank and community dipping is the most effective means of keeping the farm flock free of ticks and other external parasites. The low cost

and serviceability of the concrete tank has stimulated the demand for their construction and, in consequence thereof, the present staff is hardly able to take care of the requests that are received from sheep breeding districts for directions along this line. When dipping is done cheaply and effectively, farmers realize that it is essential for the production of good market lambs and better wool. The practice of annual dipping is now becoming general in many districts, especially those that have permanent tanks and where dipping demonstrations have been held. The expansion of the sheep industry is tending to create a bigger demand for sheep shearing demonstrations and instruction on the proper method of preparing the fleeces for market. In order that the number of expert sheep farmers might be increased in the country, a number of special classes were held, these being well attended. Students from these classes are now contracting for sheep shearing work in a number of districts, and where they operate the fleeces are properly rolled and tied. Encouragement is being given towards the organization of car-lot shipments thus reducing market expenses and tending to stimulate the consignment of wool for grading and co-operative sale.

Development of the hog grading policy and the amendments thereto requiring drovers either to grade their hogs or in lieu thereof mark each individual farmer's lot has greatly increased the demand for hog grading demonstration work at country points. These demonstrations do a great deal to familiarize the farmers with the various hog grades and assist the drovers very materially in the purchase of hogs on grade at country points. These demonstrations and the local grading on the part of drovers have done much to stimulate further the introduction of better breeding stock and a consequent improvement in the quality of commercial hogs.

SHEEP AND SWINE MARKETING COURSES

Series of sheep and swine marketing courses were again held during the year. Farmers in Eastern Canada were interested in the application of the new hog grading regulations requiring the local grading of hogs or in lieu thereof the marking of each farmer's lot of hogs, and this feature of the program no doubt accounted to some extent for the increased attendance at swine courses.

These courses commence in the late fall, extending through until April. The program for the most part covers two days, although numerous courses are held of one-day duration. In Ontario many of the courses were held in conjunction with the regular short courses organized by the Ontario Department of Agriculture. The program for the first morning in the case of sheep usually consists of lectures and discussions on sheep raising in general, the breeds of sheep and points in connection with the establishment of flocks, feeds and feeding. At swine marketing courses, the first morning is usually devoted to a hog grading demonstration, particularly where the date of the course has been arranged to coincide with a regular shipping day. This gives the farmer an opportunity to study market requirements and market type in hogs, as well as getting acquainted with the official grades of hogs. Other matters dealt with at the sheep courses are: flock improvement and the production of market lambs, lamb grading, finishing for market, wool grading and co-operative wool marketing, the grading of lamb carcasses and how to cut a lamb carcass for the retail trade. Demonstrations are also given on shearing, dipping, docking and castrating. At the swine marketing courses, markets at home and abroad are discussed in detail. Judging classes are used to demonstrate the type and quality of breeding stock necessary for the production of select bacon hogs. Feeds and feeding, including rations for the growing pig as well as rations for finishing purposes, buildings and equipment, and practical suggestions in hog management are also dealt with. Such courses appear to be of special interest to farmers,

particularly now that the grading and co-operative sale of both hogs and lambs make it possible to relate market conditions back to the individual farmer in terms of dollars and cents. The demand for marketing courses and meetings was larger than ever in 1928 and the attendance reached as high as 400 at certain courses.

During the year a great many special and regular meetings were held in the various provinces. These meetings are called for the purpose of dealing with the application of policies, the organization of clubs and associations, organization of sheep and bacon hog fairs, the initiation of hog grading and other matters pertaining to the sheep and swine industry.

CO-OPERATIVE SHEEP AND SWINE MARKETING

In the Maritime provinces our promotion staff has given consistent support to the Maritime Co-operative Live Stock Marketing Board in the building up of shipping clubs already established and in the organization and development of new co-operative live stock shipping centres.

As a result of boys' and girls' swine club work followed by Bacon Hog Clubs and Sheep Fairs and Lamb Sales, the improvement of sheep and hogs in these districts has made it necessary to take steps looking towards the development of a larger measure of co-operative marketing service in the province of Quebec. Steps have been taken during the past year towards the establishment of a Federated Co-operative Live Stock Marketing Department, under the Co-operative Fédérée for the province of Quebec. It is hoped that under this department there may be established local Live Stock Shipping Associations throughout the province which will function from week to week and from month to month throughout the year in the marketing of live stock from the districts in which they are organized. It is believed that such an organization can do much to capitalize the improvement work resulting from existing sheep and swine policies and would provide definite encouragement to the farmers to take an active interest in the marketing of their own sheep and hogs on a graded basis and according to co-operative principles.

Consideration is also being given to the improvement and establishment of live stock shipping associations in the other provinces. As a result of promotion activities co-operative sheep and swine marketing is being extended to many new districts.

SIRE LOAN POLICY

Loans of rams and boars are now restricted to special districts and special circumstances. The greatest advantage is taken of this policy in the province of Alberta where there seems to be a greater demand, especially from foreign settlements, for bacon-type boars and pure-bred rams. The developmnt of the sheep and swine club policies also creates a demand for the loan of suitable sires and the requirements of such clubs are being taken care of. There are at present 266 rams and 265 boars on loan.

SIRE PURCHASE POLICY FOR RAMS AND BOARS

Assistance in the purchase of breeding sires is a service which individual farmers and associations are coming to use more and more. In the province of Quebec ram purchasing delegates are appointed by clubs or districts, and when orders for twenty-five or more pure-bred rams are required, the purchasing delegate is able to reduce purchasing cost and at the same time secure better average quality of stock for the district. The newer and northern sections of the province find individual purchasing of live stock too expensive and are resorting more and more to the service which the promoter can render by pur-

chasing through the Sire Purchase Policy. Closely associated with the purchase of rams and boars has been the selection and purchase of brood sows and breeding ewes. The policy is particularly adapted for newer districts or those distant from pure-bred breeding centres.

SHEEP AND SWINE EXHIBITS

The special feature of the Sheep and Swine Exhibit work during the past fiscal year was the exhibit prepared for the Western Fair circuit and later used at the Royal, in which the lessons learned by the farmers' tour of Great Britain and Europe, conducted by the Canadian National Railways, were forcefully presented. In the swine section of this exhibit, the artist presented in the foreground a scene of comparative desolation and barrenness with the motive of depicting the low ebb of agriculture in Denmark some forty-five years ago. On the first of two moving panels was a scene happily entitled "Morkelberg's vision." The artist showed the late Peter August Morkelberg contemplating a native Landrace sow, at the same time visualizing the tremendous consumptive power of the British bacon market and what it would mean to the trade in their own country if they could take advantage of it. The second rising panel presented the major influences in the organization and successful development of the Danish pig industry, namely, the Danish breeding centre which is the source of supply of approved breeding animals for the farmers; the testing station where with characteristic thoroughness the breeding stock is tested through its progeny for economy in production and ability to produce the proper type of bacon; the co-operative packing plant where the farmer is paid for his hogs on a graded basis after which the product is processed and later marketed intelligently in England through a combination of co-operatives. The stationary background depicted the result of this careful organization and the fulfilment of Morkelberg's vision, namely, a well-balanced agriculture and prosperous Denmark. The lesson to Canada from this exhibit in regard to the development of our swine industry was the need for the further development of the hog-grading policy and the purchase of hogs on a graded basis so as to continually emphasize the need for improvement, this to be supported by an intelligent study and improved recording of our pure-bred breeding stock so as to ensure farmers a supply of efficient bacon-type breeding stock and finally the need for an intelligent marketing of the product so that its favour with consumers, both at home and abroad, is assured.

The sheep section featured the success achieved by New Zealand in the matter of lamb and wool production. In the foreground the artist depicted New Zealand as a Dominion with areas naturally adapted for sheep. On the first of the moving panels, behind the scene already mentioned, was an illustration of the grading of lambs and wool in accordance with national standards, while the second moving panel depicted the national marketing policy, both as to lambs and wool, as carried on in New Zealand. In the background selection and improved methods in breeding so as to meet national standards in the production of lambs and wool were set forth. The general effect of the lamb section was to show that New Zealand having capitalized her natural adaptability for sheep raising now realized millions of dollars annually in national revenue. The lesson which this exhibit conveyed to Canadian producers was the importance of developing organization in both the production and marketing ends of the business so as to achieve the maximum results.

Another important feature of the exhibit work during the past year was the assistance provided by the department to make possible the drovers' Carlot Competition in bacon hogs at the Canadian National Exhibition. The excellence of this exhibit is now a matter of record throughout the Dominion and bore adequate testimony to the soundness of the hog-grading policy, and the

steps which are being taken to have hogs graded at country shipping points, in that the drovers competing in this event were all men who practised buying on grade, and for this reason and no other were they able to contribute carloads of bacon hogs of such merit to this exhibit.

GOAT EXTENSION WORK

Goats continue to grow in popularity in urban districts and in other parts of the Dominion where the dairy cow cannot be kept profitably. The inauguration of the Record of Performance Test for Goats in the province of British Columbia indicates the development of improvement which is taking place in the dairy qualities of these animals. The bringing of this policy into effect was delayed somewhat, however, during the latter part of the fiscal year. Seven entries were received under this policy from the province of British Columbia —four Nubians, two Saanens, and one Toggenburg. It is quite likely that during the coming year a considerable number of entries will be added to these and a number of individuals will already have completed their first records.

There is now considerable demand for breeding goats in various parts of the Dominion and there is also a small surplus of good breeding stock in British Columbia. An effort is being made to assist in the further distribution of good milking strains of milk goats as required throughout the Dominion.

POULTRY DIVISION

The high degree of prosperity which the poultry industry of Canada has enjoyed in recent years continued to manifest itself during 1928. The per capita consumption of eggs in Canada in 1928 again showed an increase, being 30·65 dozens as compared to 29·71 dozens for 1927. This high domestic consumption, which greatly exceeds that of any other country, is a splendid tribute to the standardized grading of eggs and is due not only to the fact that a standardized product is being sold to consumers but that, through the requirements of the Egg Regulations, the consumers preference for quality is carried back to the producer and is resulting in the greatest possible encouragement to the production of a high quality article.

Taking the year as a whole prices to producers for eggs have not been quite as high as the very profitable levels which prevailed in 1927. Canadian prices, however, are still substantially above those prevailing in world markets, a situation undoubtedly due to the heavy domestic demand. The situation with respect to both imports and exports showed an improvement over 1927. For the calendar year 1928 exports were 988,586 dozens, as compared to 527,946 dozens in 1927. Imports during 1928 were 996,880 dozens as compared to 3,226,645 dozens in 1927. In this connection, though, it should be noted that exporters were forced to sell storage eggs at prevailing prices on world markets which, while not showing any great profit on the storing operations, have been more or less essential in view of the rather heavy stocks on hand and the depressing influence of a very unsatisfactory storage situation in the United States.

Continued improved methods of production on general farms, the use of better breeding stock and the profitable returns to be secured from poultry keeping are resulting in a continued increase in fresh egg production during the fall and winter months. This is having the effect of continually shortening the period during whch storage eggs are required and it is generally realized that storage eggs will, in future years, become decreasingly important. Such a situation means that greater percentages of the surplus spring production will have to be moved into immediate consumptive channels and while the sale of a standardized product has aided and will continue to aid materially in this

respect it seems imperative that more attention be paid to the advertisement of eggs to consumers after the manner carried out in the Egg Publicity Paragraphs in order that spring consumption may be increased still further.

Extremely encouraging results were secured from the campaign conducted during 1928 to increase the consumption of poultry meats. This work was carried on with special vigor during the broiler season and dealers in cities where the work was conducted experienced greater sales for broiling chickens than ever before. The campaign has been based fundamentally on the belief that split poultry, properly dressed and offered for sale in an attractive manner would meet with greater favour among consumers than poultry sold in the ordinary manner. The experience of the past year has proved this to be the case and a continued vigorous conducting of the campagin along this line will, undoubtedly, have a tremendous effect in increasing the popularity of poultry meats.

In connection with the broiler consumption campaign attractive folders were issued giving general instructions and recipes for frying and broiling chickens. These were widely distributed and appreciated and augmented admirably the campaign to encourage retailers to split birds before selling.

The Poultry Division has also turned its efforts along this line to chicken and fowl, it having been demonstrated that the splitting and cleaning of these birds is fully as practicable as in the case of broilers.

DRESSED POULTRY STANDARDS

Undoubtedly one of the most important developments in the poultry industry during the past year has been the legalization of National Standards for dressed poultry and the inauguration of voluntary inspections of poultry in carlots for interprovincial shipments, graded according to the National Standards. The final putting into operation of official dressed poultry inspection culminates years of effort along this line by both the department and the Canadian Produce Association. The standardized grades were legalized only after the viewpoints of all interests had been consulted and after all changes had been approved by the dressed poultry committee appointed by the National Conference held in Winnipeg in January, 1927. The careful consideration given to this matter before final adoption seems to have assured the project receiving wide support and the National Standards were used widely last year in all parts of the country in the purchase and sale of dressed poultry.

The dressed poultry inspection comes directly under the Poultry Promotion Service, the inspections being carried on by the promoters in the various provinces.

It is interesting to note here that requests have been received that the department, in addition to legalizing standards for trading in dressed poultry, also stablish standards for live poultry. The live poultry shipping clubs, organized by poultry promoters, have proved beyond doubt the practicability of grading poultry into cars at point of loading and paying farmers according to these grades after the poultry has been sold.

POULTRY PROMOTION SERVICE

To the Poultry Promoters must be given much of the credit for the general improvement in conditions of the Canadian poultry industry in recent years. On these men falls largely the task of making the various policies of the Poultry Division of practical benefit to the farmers. They have organized provincial breeding policies and hatchery associations, which have served as a means of distribution of the fine breeding stock produced under Record of Performance. Through the co-operatives they have interested farmers in the marketing of their product and in the securing of greater returns for their product.

Considerable progress has been made during the past year by promoters in the various provinces with respect to the approval and banding of turkeys. There is no doubt that one of the chief needs of the turkey industry at the present time is better breeding stock, stock which will transmit to its progeny the size and plumpness which the market requires and the turkey approval work being conducted is doing a great deal to provide a source for breeding stock of this type.

The development of poultry work in the province of Quebec during the past year is deserving of mention. The stimulus which has been given to agriculture in some of the more remote parts of the province by industrial development has resulted in many calls on the Poultry Promoter service, and a promoter has been placed at Chicoutimi to serve the Lake St. John district. Five entries in Record of Performance have been received from the Chicoutimi district this year. In Montmagny and Dorchester counties a thriving industry has been developed. There are more entries in Record of Performance in the district contiguous to Montmagny than in any other district in Canada, outside of British Columbia. Considerable interest has been shown also in egg inspection work and there have been innumerable calls for assistance and instruction from the various parts of the province.

Poultry Club work and Cockerel Distribution are two Poultry Promotion policies which have met with distinct success in the Maritime Provinces. Realizing that the chief hope for a greater poultry industry in New Brunswick and Nova Scotia lies in developing a keen interest among the young people, the officers in these two provinces have been active in poultry club development and large numbers of farm boys and girls have been interested in the work.

Through the Cockerel Distribution policy large numbers of well-bred cockerels have been distributed and it is quite apparent that these are having a tremendous effect in improving the quality of the poultry in the flocks in which they are used. The Live Stock Branch and the provincial departments co-operate in helping to share the cost of the purchase of the birds.

ADVANTAGES OF THE EGG REGULATIONS

The very satisfactory condition of the Canadian egg trade to-day may be ascribed to three factors, viz., standardization of the product, application of the regulations governing purchase and sale, enforcement of the Standards.

Success attending the consistent and persistent work of the Egg Inspection Service charged with the application and enforcement of the Standards is probably more apparent in the increased per capita consumption, in which Canada leads the world.

The attached table, taken from records of the Bureau of Statistics, shows the consistent increase in per capita consumption since 1920 and also emphasizes the fact that the consuming public appreciates and takes advantage of the privilege of supplying their requirements, confident in the assurance of a properly graded product meeting their requirements.

The confidence which egg grading has established in the public mind has increased to a considerable extent the demand for the services of the Egg Inspection staff and this demand may be considered as a natural consequence of the utility of the public service rendered and progressiveness of the policy applied and enforced.

The attached tables give the comparative statements of the actual work of inspection of approval for export, import, interprovincial and intraprovincial shipments for the calendar years 1927-28.

Exports show a decided increase, which may be considered as very satisfactory in view of the high level of prices in Canada and the excellent condition of the home market.

The reduction in imports is very gratifying, and it is anticipated that the close scrutiny of the Egg Inspection service will curtail the importation of low-grade and processed eggs which have been subjected to a treatment of mineral oil, placed in cold storage and either marketed in that condition or put through a process of sand-blasting to remove the oil and market them as fresh. Under Canadian regulations they must be classified and sold as Preserved, and this requirement has largely curtailed their importation into Canada. In instances where the inspector's judgment has been severely questioned, samples drawn have been subjected to a chemical test, at the Exprimental Farm, under direction of Dr. Shutt, and in every instance the inspector's judgment has been verified.

Table No. 3 shows a very decided increase in interprovincial shipments. This is largely accounted for through the phenomenal increase in production in British Columbia, where more than 450 carloads yearly are finding a market in Eastern Canada as far east as Saint John, N.B. The total work of inspection, as detailed in tables No. 1 and 2, shows a decided increase in volume over 1927.

In addition to the regular work of inspection by approval, the inspection staff has made approximately 45,000 calls on retail and wholesale distributors in checking up their compliance with the regulations and correcting irregularities.

The most recent development of mining and industrial areas in northern Manitoba, northern Ontario, and Quebec has compelled attention in those districts as a matter of protection to conscientious traders, enlarging the scope of the activities of the Inspection Service. As an example, a car of United States eggs were shipped last year to Chicoutimi, P.Q., from Minneapolis, Minn., consigned to a large wholesale firm having a branch established there. Further, inspectors have been engaged in giving lectures before student bodies, women's clubs, etc., and candling and grading demonstrations, at exhibitions, school fairs, boys' and girls' clubs, etc.

One hundred and fourteen court actions were conducted under the Egg Regulations in 1928, and a total of $4,190 was imposed in fines.

PER CAPITA CONSUMPTION OF EGGS IN CANADA

—	Population	Production	Export	Import	Per capita consumption
					doz.
x1901	5,371,315	84,132,802	11,363,064	951,745	15-1
x1911	7,206,643	123,071,034	87,420	2,926,856	17-5
1920	8,631,475	144,475,072	6,322,838	6,515,928	16-8
1921	8,788,483	193,049,154	5,444,014	6,582,739	22-1
1922	8,940,150	219,058,468	3,619,356	8,140,547	25
1923	9,416,457	227,186,508	2,900,111	6,623,253	25-4
1924	9,226,740	238,648,685	2,716,604	4,980,704	26-1
1925	9,364,200	249,778,867	2,466,270	3,726,311	26-3
1926	9,390,000	262,080,399	1,776,559	4,156,474	28-1
1927	9,519,000	278,277,227	448,206	4,576,671	29-67
1928	9,658,000	293,456,053	988,484	3,593,794	30-65

xCensus
1920-28 Bureau of Statistics.

TABLE No. 1—COMPARATIVE STATEMENT OF EXPORT, INTERPROVINCIAL AND LOCAL INSPECTIONS

—	Number of cases inspected	Shipments approved	Shipments not approved
1927	509,641	4,692	176
1928	578,469	4,554	264

TABLE No. 2—COMPARATIVE STATEMENT OF EXPORT, INTERPROVINCIAL AND LOCAL INSPECTED EGGS

Year	Export		Interprovincial		Local		Total	
	Number of inspection	Number of cases	Number of inspection	Number of cases	Number of inspection	Number of cases	Number of inspection	Number of cases
1927	223	14,797	3,360	357,882	1,285	136,962	4,868	509,641
1928	299	34,283	3,345	427,113	1,174	117,073	4,818	578,469

TABLE 3—COMPARATIVE STATEMENT OF CASES INSPECTED BY GRADE

Interprovincial

Year	Fresh								Storage						Preserved				Total
	Extras	%	P. Ex.	%	Firsts	%	Seconds	%	Extras	%	Firsts	%	Seconds	%	Extras	%	Seconds	%	
1927	106,551	30	8,652	2·4	114,789	32·1	71,641	20·0	5,650	1·5	21,642	0·6	28,957	8·0	.....	.....	.....	.....	357,882
1928	149,512	35	19,062	4·5	128,931	30·2	68,806	16·1	6,752	1·6	20,498	4·8	31,156	7·3	1,448	0·4	948	0·1	427,113

Increase, 69,231

Local

Year	Fresh								Storage						Total
	Extras	%	P. Ex.	%	Firsts	%	Seconds	%	Extras	%	Firsts	%	Seconds	%	
1927	53,779	39·2	75	0·1	61,673	45·0	10,816	7·9	1,367	0·1	8,642	6·4	610	0·4	136,962
1928	43,793	37·3	388	0·3	56,860	48·5	11,386	10·0	833	0·7	3,512	3·0	301	0·2	117,073

Decrease, 19,889

Export

Year	Fresh								Storage						Total
	Extras	%	P. Ex.	%	Firsts	%	Seconds	%	Extras	%	Firsts	%	Seconds	%	
1927	3,395	22·9	46	0·3	92	0·6	5	0·1	2,387	16·1	8,787	59·4	85	0·6	14,797
1928	4,360	12·7	795	2·3	9,229	26·9	55	0·1	1,185	3·5	18,311	53·5	348	1·0	34,283

Increase, 19486

Year	Inspections	Approved	%	Not approved	%	Cases	Approved	%	Not approved	%
1927	4,868	4,692	96·0	176	4·0	509,641	486,346	95	23,295	5
1928	*4,818	4,554	94·6	264	5·4	*578,469	554,339	96	24,130	4

*Decrease, 50. *Increase, 68828.

TABLE No. 4—COMPARATIVE STATEMENT OF INSPECTED EXPORT SHIPMENTS BY PROVINCES

—	1927	1928
	cases	cases
Ontario	7,007	13,495
Quebec	5,146	3,675
Prince Edward Island	1,066	1,588
New Brunswick	349	224
Nova Scotia	.....	50
Saskatchewan	.....	512
British Columbia	466	12,410
	14,034	31,954

CLASSIFICATION OF EXPORTS

—	1927	1928
Fresh	3,405	14,111
Storage	10,629	17,843
	14,034	31,954

TABLE No. 5—IMPORTS, 1928

—	Fresh	Storage	Preserved	Total
Miscellaneous East	123	2,450	.....	2,573
Montreal	9,734	400	20	10,154
Ottawa	85	.....	.....	85
Quebec	1,260	.....	.....	1,260
Toronto	15,228	400	176	15,804
Windsor	984	.....	.....	984
Winnipeg	111	.....	.....	111
Vancouver	.....	.....	1,978	1,978
	27,525	3,250	2,174	32,949

COMPARATIVE STATEMENT OF IMPORTS

—	Number of inspections	Number of cases
1927	582	100,284
1928	234	32,949

RECORD OF PERFORMANCE

The favourable results being obtained by the policy of Record of Performance are becoming increasingly apparent in two ways:

1. The satisfactory financial returns being obtained by those breeders entered in the policy.
2. And more important, the great stimulus which Record of Performance is giving to poultry production on the general farms of the country and the general improvement which it is exerting on this farm poultry, not only in the increased production per hen but in the better size of eggs being obtained.

In this connection it is interesting to note that the average egg production of hens in Canada has risen seven eggs in the past six years. This means an added revenue of about five million dollars. The following table of inspections under the Egg Grading Regulations shows the steadily rising proportion of high-grade eggs:—

NUMBER OF CASES INSPECTED FOR INTERPROVINCIAL AND LOCAL SHIPMENT FOR THE FOLLOWING YEARS

Year	Extras	Firsts	Seconds	Extras
				Per cent
1921	15,070	34,397	65,276	15
1922	24,559	76,126	49,416	19
1923	59,747	125,314	95,923	27
1924	76,214	157,353	119,745	27
1925	91,837	126,252	67,188	47
1926	110,215	157,674	94,324	43
1927	160,330	176,462	82,457	61
	537,972	853,578	574,329	37

A considerable amount of the increase in the percentage of "Extras" undoubtedly is due in no small measure to the fact that the progeny of the large mass of Record of Performance certified stock now available, is having its influence on the general farm flocks of the country, where it is widely used.

The Record of Performance breeders have formed associations in eight provinces. These associations carry on the cockerel approval work and some of them are very active in the sale of members stock. The British Columbia Association in 1928 sold $90,000 worth of stock, a large part of which went to the United States.

The outstanding event of 1928 in connection with Record of Performance work was the request made by the Canadian Baby Chick Association for an Approved Hatchery policy, to be under the same administration as the Record of Performance work. Provision is made in this policy for the use of Record of Performance males to head flocks from which the hatcheries secure their eggs. This will do more than anything else to bring about the wide and speedy distribution of Record of Performance stock among the general farm flocks of the country.

It is in raising the average production and the egg size of these farm flocks that Record of Performance will attain its greatest usefulness. The effect of the work done over the past nine years is now being felt.

EGG AND POULTRY MARKETS INTELLIGENCE

The Weekly Egg and Poultry Market *Review* issued first in printed form in 1927 has continued during the past year to grow in circulation and prestige. Its circulation is now in excess of six thousand copies weekly and it reaches producers and dealers in every part of Canada. This publication has had two very beneficial results. It has served to give to the seller the same knowledge of conditions and prices as are in the possession of the buyer and it has brought to producers an understanding of market conditions which are so essential if the producer is to take a keener and more intelligent interest in the marketing of his product.

A noteworthy devolopment of the past year has been the printing of the Egg and Poultry Market *Review* in Vancouver concurrently with its issuance in Ottawa. The length of time required to mail the publication from Ottawa to

British Columbia made the information contained therein more than a week old when delivered to British Columbia subscribers. In fairness to the British Columba poultry industry it was thought advisable to print this publication in Vancouver in order that producers there could be given the same prompt service available to producers in Eastern Canada.

In addition to the Weekly Egg and Poultry Market *Review* a daily market report is isued by the Poultry Division covering briefly prices and conditions on the leading markets.

The information for these reports is secured largely from members of the Egg Inspection Service, although in the more important centres where egg inspectors are not permanently located, private correspondents are employed.

In addition to the Canadian service, cables and market letters are received regularly from Great Britain. Information is secured continually from the United States and from these various sources Canadian dealers and producers are kept in constant touch with world market conditions and prices.

EXHIBITS AND POULTRY

The Poultry Division continues to carry on a program of publicity through exhibits, the distribution of printed material and the use of the press. Practically all of the more important fairs and exhibitions in Canada were attended this year in addition to a large number of the smaller poultry shows. A noteable achievement in exhibits in 1928 was the exhibit designed to illustrate the lessons learned by the Canadian National Railway Farmers Marketing Tour to Great Britain in 1927. This exhibit was staged through the co-operation of the Live Stock Branch and the Canadian National Railways and was sent to all the Class "A" fairs in Western Canada, the Amherst Winter Fair, and the Royal Winter Fair at Toronto.

One of the most encouraging developments of recent years in connection with exhibits, as they relate to the poultry industry, has been the establishment of large egg display sections at some of the large exhibitions. For two years a National Egg Show has been staged at Vancouver and an exceptionally fine show was arranged at Edmonton this year. This new type of egg show, designed to attract both producers and consumers, consists of displays erected by various egg dealers and of candling booths and cooking demonstration booths provided by the Live Stock Branch. The egg inspectors have been the chief movers in this new type of egg exhibits and great credit is due to them for this development.

A publicity innovation of 1928 which has met with wide approval has been the distribution, through the co-operation of the members of the Canadian Produce Association, of a series of attractive leaflets to farmers pointing out the proper ways to market eggs and discouraging a number of undesirable practices. One such series of leaflets dealing with the production and marketing of dirty eggs was issued directly as a result of a request for departmental aid along this line from the Canadian Produce Association.

The Publicity Paragraphs on eggs, as issued in 1927, continue to meet with a steady and encouraging distribution.

MARKETS INTELLIGENCE AND STOCK YARDS SERVICES

The Markets Intelligence and Stock Yards Services of the Department are administered through the Live Stock Branch. These services represent the mediums through which the department promotes the marketing of commercial live stock in Canada. Annually about 1,250,000 cattle, 300,000 calves, 4,000,000 hogs and 500,000 sheep and lambs are liquidated through facilities and services

under the supervision of the Dominion Live Stock Branch: The value of such marketed stock varies between $125,000,000 and $130,000,000 per annum.

The marketing services supplied through the branch are designed to stimulate production and trade through the following mediums.

Through the Live Stock Commissioner, regulations are being enforced, governing the construction, maintenance and operation of public stock yards throughout the Dominion, and the methods employed in the actual sale and purchase of all live stock marketed at such yards. As well, the markets intelligence service makes available to producers and trade, detailed information as to supply and demand of commercial live stock marketed at, or passing through any or all of these yards. Further, this service includes a bureau of broad and detailed intelligence in regard to general live stock and meat trade, both domestic and foreign, and issues daily, weekly, monthly and annual reviews and comments on supply and demand on domestic and foreign markets.

The stock yards duties are discharged by qualified officers of the branch stationed at each of the public stock yards. These yards, nine in number, are located at the following places: Calgary, Alta.; Edmonton, Alta.; Saskatoon, Sask.; Prince Albert, Sask.; Moose Jaw, Sask.; Winnipeg, Man.; Toronto, Ont.; East End, Montreal, P.Q.; and West End, Montreal, P.Q.

The market reports data and allied information is obtained through co-operation as between the stock yard agents and their assistants, and the Market Intelligence editorial and statistical staff at headquarters.

During the past year, total live stock values have been advancing and have exceeded those of the previous year by a considerable amount. Average returns on the rank and file of the cattle offerings have been eminently catisfactory during the greater part of the market period. The market conditions influencing the sale of this stock were analyzed for the benefit of producer, trader and consumer, and, as well, permanent statistical records made of each purchase and sale, for future reference.

The complete rebuilding of the stock yard facilities at Point St. Charles, Montreal, P.Q., into a thoroughly modern market, partly carried on during the year and now being finished, constitutes one of the greatest forward movements in the interests of the live stock industry of the province of Quebec and, as well, of Canada as a whole. These new yards, being built by the Canadian National Railways, will meet every requirement as laid down under the Live Stock and Live Stock Products Act. Two units were completed and in operation during the past fiscal year and the two remaining units are now in process of construction: Point St. Charles will then have the most modern, substantial and complete stock yards facilities on the North American continent.

Since our previous report was issued, revised rules and regulations under the Amended Act have been approved for all exchanges. Trust Accounts for the handling of the proceeds of sales of live stock sold on commission are now operated, under the Act, by all commission merchants and Co-operative Associations doing business at public stock yards. As well, the majority of the live stock dealers have been bonded and the remainder are in process of being bonded. Also, the registration is completed of all persons and firms doing business at stock yards. In a word, strong progress is being made in the business of making Canadian stock yards system the best organized and operated on the North American continent, in the interest of all parties concerned, but primarily in an effort to serve better the live stock industry.

During the past year the department, in co-operation with the railway companies and live stock interests east and west, have been making specific tests with stock cars equipped with movable partitions, designed to reduce loss and

suffering of animals in transit. To date, tests carried on in eastern and western provinces have been most satisfactory, and have met with general approval from live stock producers and other interested persons.

The chief activities of the services are hereunder enumerated:—

1. Enforcement of regulations, as provided under the Live Stock and Live Stock Products Act, resulting in:—

(*a*) the bonding of commission men, operating on public stock yards;
(*b*) the operation of Live Stock Exchanges under Government supervision;
(*c*) the regulation of service charges; and
(*d*) improvement in, and supervision of the accommodation provided for live stock; and
(*e*) the regulating of the quality and cost of food supplied.

2. Officers of the branch located at the central stock yards at Montreal, Toronto, Winnipeg, Calgary, Edmonton, Prince Albert and Moose Jaw, graded for publicity purposes all live stock offered for sale, obtained detail as to the selling price, origin and disposition of the stock and, as well, the general condition of supply and demand.

3. The stock yards officers supplied the press with daily market news, letters and representative live stock sales. These, together with the weekly, monthly and annual analysis of supply and demand, have practically eliminated all other markets information services. Accurate analysis and quick service has in this way taken the place of the often contradictory and ambiguous statements of market conditions formerly in circulation.

4. The inter-Stock Yards Telegraph Service inaugurated during 1919 was continued throughout the year. Telegrams are prepared by each stock yard agent, after a careful analysis of the condition of trading, and are wired each day as soon as the market is established, to the other stock yard agents. Previously, only those who could afford a telegraph service were able to benefit through immediate knowledge of the day's trading conditions at other than their own market.

5. The Daily Press Telegraph Service, inaugurated in 1919, is being continued. This consists of analysis of the conditions of supply and demand, telegraphed each day over the Canadian Press Limited, for publication in the daily news press of Canada. These wires are prepared by the officers at each of the yards at 11 a.m. and 4 p.m. daily, and appear the same evening and the following morning in practically every evening and morning paper in Canada.

6. The Weekly Markets News Service is being provided to the agricultural press of Canada, to district representatives of agriculture, to a selected producers mailing list, to the various provincial Departments of Agriculture, and to the British and American trade. This service consists of an analysis of live stock supply and demand, comments on prospects for future markets, statistical tables showing the grading, numbers, average prices, price range for bulk of sales and top prices of all live stock offered for sale, the disposition and comparative receipts of the same, the grading of hogs under the Hog Grading Policy, and the exports of live stock to foreign countries.

7. To meet a growing demand for the same, the Market Service undertook, in March, 1925, the translation into French of the commentary section of the weekly Live Stock Market Report. The French edition is being mailed to the French press, Agronomes in Quebec, and to a list of live stock producers who have requested the report.

8. A special report on the opening market of each week is prepared by the stock yard representatives and sent to the Farm Press in time for publication in the current issue.

9. Each month, publicity is given to the live stock industry by the distribution of information on domestic and foreign crops, weather conditions, live stock and allied industries.

10. Memoranda on production, distribution and consumption of live stock and live stock products, both domestic and foreign, are prepared for the information of officers of the department and outside parties.

11. This service continues to build up an information bureau on the statistical position of the live stock industry, general conditions under which live stock production is undertaken, the foreign live stock situation, the world's animal foodstuffs situation, the condition of the import and export trade in live stock and live stock products, and the financial conditions influencing the industry.

12. The service is recording the point of origin, class, grade and sex of all stock offered for sale at stock yards. These records cover the sales during the past six years and are compiled in such a way as to be of value in estimating the condition and extent of the marketable surplus, either locally, provincially or for Canada as a whole. A monthly statement is sent to each of the agricultural representatives in the various provinces of Canada, showing the shipments from his particular county, in detail, to public stock yards, abattoirs, and on export.

13. The inspected packing plants throughout the Dominion continue to supply weekly statements to their country purchases. As a large percentage of the total annual slaughterings by inspected establishments are not sold on the public market, the information obtained is indispensable to a complete survey of the supply and demand situation.

14. Through arrangements between the Department of Agriculture and the Department of National Revenue, the branch records and issues information covering the origin and destination of all classes of live stock exported from the Dominion. This information completes the record of the total movement of Canadian live stock during any period of the year, and allows for the working out of formula on which to estimate probable production and distribution.

15. A weekly cable service of the British market for Canadian cattle and bacon is telegraphed by the division to the Canadian newspapers. The information is being supplied by the most reliable operators on the markets at Glasgow, Liverpool, and London. These cables are elaborated in the branch and given the widest publicity possible through the medium of the Associated Press of Canada and our periodical publications.

16. A daily wire service is operative between the stock yards officers and the United States markets, with a view to obtaining exact and immediate knowledge of the prospects for export. Considerable financial benefit to the live stock industry is resulting from this service, shippers now being better able than heretofore to estimate the margin between domestic and foreign market prices before making shipment.

17. The Eight Annual Review of the Live Stock and Meat Trade situation has been published and distributed.

18. The Eighth Annual Report on the origin and grades of commercial live stock has been published and distributed.

19. The policy whereby immature calves offered for sale on public stock yards are subject to condemnation was again administered by the Live Stock Commissioner through the stock yard representatives. This policy has been effective for a number of years and has resulted in marked improvement in the quality of veal offered for public consumption.

20. The markets staff is taking care of the compilation of the statistical information in connection with official hog grading under the Federal Hog Grading Policy. The stock yards agents co-operate with the hog graders in promoting satisfactory development of grading of hogs at the yards.

21. The stock yards agents have extended their activities toward promoting familiarity with required market types of live stock. On request, the agents have addressed meetings, paid visits to farms for the purpose of grading the stock into the various classes and, as well, have encouraged the clearance of unsuitable feeding stock and the purchase of that of good feeding type and quality.

22. A radio markets and agricultural news service developed during the spring of 1924 has been appreciably extended. Under arrangements with the Canadian National Railways Radio Department, the Markets Service broadcasts the latest reports on the live stock markets in Canada twice each week, supplementing the live stock, poultry, farm products, crop and weather reports with talks on farm practices and agricultural developments. At present, this service is being broadcast weekly from the following cities: Moncton, Toronto, London, Montreal, Quebec, Winnipeg, Calgary, Edmonton, and twice weekly from Ottawa. In addition, daily reports are broadcast from Moncton, Montreal, Ottawa, Toronto, and Winnipeg, giving a summary of quotations on the same morning's markets. Live stock markets, dairy produce, eggs and weather report data make up the programs, and are especially designed to be useful to the producers in Eastern Canada.

During 1929-30 this division will continue its efforts to further enlarging the projects already in operation.

THE SEED BRANCH

The Seed Branch encourages the production of superior seed for domestic requirements and export, performs field inspection of seed crops for registration and certification as to purity of variety and quality, grades all field seeds offered for sale on the basis of control samples or of official samples drawn by inspectors; maintains laboratories for the analysis of seeds, feeding stuffs, fertilizers, binder twine, insecticides and fungicides; develops the marketing of these products and of hay and straw which are also graded on request; administers the Seeds Act, Feeding Stuffs Act, Fertilizers Act, Inspection and Sale Act, and Agricultural Pests' Control Act. The branch organization includes four main divisions, and for the enforcement of the Acts, Canada is divided into seven inspection districts, each supported by a service laboratory.

The Laboratory Division

This Division tests materials controlled by the various Acts administered by the Seed Branch, viz., the testing of seeds for purity and germination, microscopical and chemical analyses of feeding stuffs, fertilizers, insecticides and fungicides, and the testing of binder twine. During the year facilities were provided for field plot testing at Sackville, New Brunswick, where it is intended to check field root and garden vegetable seeds of commerce for purity of variety.

The work of the whole division was formerly carried on at the central laboratory at Ottawa. The ever increasing number of samples and the need for prompt service made the establishment of additional seed laboratories necessary. A total of 66,880 samples were received and tested as compared with 54,146 samples during 1927-28. Laboratories are situated at Ottawa, Sackville, Quebec, Toronto, Winnipeg, Saskatoon and Calgary, those at Sackville and Saskatoon having commenced operations during the present year. All chemical and microscopical analyses are done in Ottawa. The following table shows the number of samples received in each laboratory during the past year, and their sources:—

—	Trade	Customs	Official	Total
Sackville[1]	289	.....	.....	289
Quebec	4,025	1,833	802	6,660
Ottawa	7,513	1,539	2,493	11,545
Toronto	7,577	4,852	470	12,899
Winnipeg	10,590	1,828	849	13,267
Calgary	15,127	1,792	367	17,286
Saskatoon[2]	4,487	294	153	4,934
Totals	49,608	12,138	5,134	66,880

[1]During March, 1929. [2]From January 8 to March 31, 1929.

Trade refers to samples sent in by merchants, farmers and institutions.

Customs refers to samples taken by Customs or Seed Branch officials in accordance with the Seed Importation Regulations.

Official samples are those taken by inspectors from lots which are sold or offered for sale and suspected of violating the Acts.

The grades provided in the Seeds Act are based on a number of factors, the most important of which are purity and germination. The following table gives the number of purity analyses and germination tests carried out at each laboratory:—

—	Purity	Germination	Total
Sackville	289	.....	289
Quebec	5,756	6,293	12,049
Ottawa	6,817	8,599	15,416
Toronto	11,265	11,894	23,159
Winnipeg	7,335	12,755	20,090
Calgary	5,598	17,328	22,926
Saskatoon	1,770	4,302	6,072
Totals	38,830	61,171	100,001

The total of 100,001 tests for the year compares with 76,366 for the year 1927-28.

The bulk of the samples are naturally received and tested between threshing and seeding time, a fact which makes the distribution of work over the year very uneven, and consequently the giving of the desirable prompt service is sometimes made very difficult through lack of sufficient and well-trained staff. Only a nucleus of a permanent staff is maintained the year round, and this has to be supplemented during the busy season by temporary help. The following is the distribution of the work over the different months of the year:—

—	Purity	Germination
	%	%
January	13·4	16·1
February	13·9	17·4
March	15·5	16·8
April	14·5	8·7
May	9·6	7·2
June	7·1	4·5
July	3·5	2·1
August	2·1	1·3
September	1·7	1·8
October	4·3	5·3
November	6·1	8·4
December	8·3	10·4
	100·00	100·00

Investigational and research work carried on by the Division is largely confined to problems connected with seed testing, weed distribution, or agronomical technology closely related to the subject of seeds. Among some major problems receiving attention is a descriptive catalogue of seeds with illustrations, on which work has steadily been done for a number of years; investigations on the hard-seededness of clovers as affecting their agricultural value; seed dormancy problems, particularly on carrots; further study on the determination of the origin of red clover and alfalfa seed; morphological seed studies of the genus *Agropyron;* the catalase method for the determination of the germination power of seeds; the determination of seed-borne diseases; and a number of minor problems. The laboratory staff again co-operated with the inspection division in investigations of a more practical nature, such as seed drill surveys carried out to ascertain the quality of seed used by farmers in different districts.

EDUCATION AND OTHER ACTIVITIES

The policy of preparing and distributing at cost collections of economic and weed seeds to farmers, seed merchants and schools was continued. In addition some larger sets comprising around 700 species of Canadian weed seeds were prepared on special request and supplied to institutions such as the Royal Botanical Garden, Kew, England, and the University of Western Ontario, London.

Because of special climatic and soil conditions, seed production on a commercial scale is localized for many kinds of seeds in relatively small centres. For this reason the seed trade has an eminently international aspect. In order to facilitate legitimate international trade in seeds and to check harmful practices it is highly desirable that methods of seed control be established on a uniform basis throughout the world. To further this aim the laboratory division has again collaborated with the International Seed Testing Association and the Association of Official Seed Analysts of North America in testing several sets of referee samples in all the laboratories.

The Division collaborated with the Seed Division in a number of educational exhibits at fall and winter fairs. Reprints of papers giving the results of investigational work were widely distributed.

MICRO-ANALYSIS OF FEEDING STUFFS

During the year 1,731 samples were analyzed microscopically. They may be classified as follows:—

Mixed feeds	679
Wheat mill feeds	469
Other by-products	348
Screenings	125
Chops	104
Miscellaneous	6

The mixed feeds were for the most part of good quality. Manufacturers seem to be endeavouring to make feeds that are well balanced and to use as ingredients products free from adulteration. There is still a tendency, however, to omit or add ingredients or to substitute products for ingredients claimed on registration, making constant supervision necessary.

Most of the wheat mill feeds received were of the required standard. When samples were " dirty " it was noted that those from the larger mills contained scourings with very finely-ground weed seeds, while those from the smaller mills contained some coarsely-ground weed seeds which had not been removed by the cleaning machinery.

By far the greatest number of by-products examined were from abattoirs. Hoof was found to be the principal adulterant in these feeds, and is widely used

in meat products with a high protein content. Other by-products, with a few exceptions, were found to be pure. Ground screenings and ground oat hulls were reported as adulterants in a few instances.

Most of the samples of screenings submitted for analysis were described as Standard Recleaned Screenings, Mill Screenings, or Scalpings. These products are becoming standardized and are usually "clean" within the meaning of the Feeding Stuffs Act. Only a few of the poorer grades of screenings were examined, and these as usual contained vital weed seeds and injurious material in excess of that allowed by regulation.

No deliberate adulteration of chop feeds was detected. A few samples contained excess vital weed seeds and injurious material. A number of samples of ground heated grains were examined and found to be mouldy.

In addition to the routine work of the laboratory, investigations were carried on to discover or improve methods of analysis.

CHEMICAL ANALYSIS OF FEEDING STUFFS AND FERTILIZERS

The number of samples of feeding stuffs received for analysis at the Ottawa laboratory was increased by twenty-five per cent over last year. Most of these samples were taken by inspectors to check the guarantee or standard of the products. Some were received from manufacturers for registration purposes, and others from interested parties. A fee of $10 per sample is charged for a complete analysis of protein, fat and fibre.

The samples may be classified as follows:—

Mixed feeds	746
Bran	206
Shorts	211
Middlings	147
Feed flour	60
Screenings, scalpings and scourings	119
Packing house by-products	177
Oatmeal by-products	55
Cereal chops and by-products	127
Oilcake meals	52
Miscellaneous	99
Total	1,999

Investigational work was conducted on oat mill by-products, alfalfa meals and screenings to inquire into the value of present standards and to establish new standards. A number of flour samples from shipments for the Orient were tested for moisture content.

The total of fertilizer samples received for analysis showed only a slight increase, but the number of complete fertilizers analyzed increased one hundred per cent. They may be classified as follows:—

Mixed fertilizers	166
Pure salts	55
Packing house by-products	28
Basic slag	43
Acid phosphate	44
Miscellaneous	5
Total	341

The quality of the various feeding stuffs and fertilizers is dealt with under their respective divisions.

THE AGRICULTURAL PESTS' CONTROL ACT

Approximately 275 brands of agricultural economic poisons were registered during the year ending December 31, 1928. This was the first year for registration, and manufacturers are endeavouring to comply with the Act. Before any preparation for the control of insects, fungi, weeds, rodents and similar

agricultural pests can be sold legally in Canada, it must be registered and assigned a registration number. Application forms are supplied upon request from the manufacturer or importer.

The brands registered may be clasified as follows:—

Fly sprays	32
Gopher and rat poisons	18
Weed killers	11
Arsenical preparations	51
Flea, lice and roach powders	34
Nicotine preparations	15
Coal tar dip and disinfectants	24
Lime sulphur sprays	12
Sulphur dusts	10
Oil and oil emulsions	13
Bordeaux mixtures	13
Fungicides	23
Miscellaneous	16
Total	272

Inspectors have been taking samples of representative brands of various economic poisons for analysis, but only minor infractions have been found.

The Seed Division

The work of the Seed Division consists in part in the study of foreign and domestic seed legislation, also of the import and export regulations in effect in all countries exporting or importing seeds. This study is made with a view to drafting new or redrafting existing control measures to be submitted for the Minister's reconsideration. The Division deals primarily with the operation of the Seeds Act and regulations thereunder. Attention is given to seed production, to seed supply as between districts and provinces, to international trade in seed of all kinds, and to the preparation of exhibition material for publicity and educational purposes.

AMENDMENTS TO THE SEEDS ACT

Suggested amendments to the Seeds Act were prepared following the recommendations received from seed growers' organizations, the Canadian Seed Trade Association, and the Advisory Board in conference with Seed Branch officials. These amendments were embodied in an Act to Amend the Seeds Act, which, with a few minor changes, was passed by Parliament on June 11, 1928.

The principal amendments included a change in the names of certain grades of seed; provision for the withholding of a licence to sell new varieties of cereal grains if such are found to possess such inferior qualities or characteristcs as to impair their value for commerce; the giving of power to the minister to change a variety name when it is found in the public interest to do so; a change in the provisions governing the importation of seeds so that they may apply to seeds, named in section 5 of the Act, imported for the purpose of selling or offering for sale or for the purpose of seeding, or any kind of garden or vegetable seeds that may be prescribed by regulation unless they are branded, marked or coloured in accordance with the provisions of the Act and conform to the regulations thereunder. A few minor amendments, which experience has shown to be necessary, were made in order to overcome difficulties in the administration of the Act.

REGULATIONS UNDER THE SEEDS ACT

The Advisory Board under the Seeds Act operates with the Seed Commissioner as chairman and the Chief of the Seed Division as secretary, and includes an equal representation of seed growers and seed merchants and the Chairman of the Agricultural Committee of the House of Commons.

Recommendations were made by the board at the 1928 meeting, and approved by the minister, embodying such changes in the grade standards with respect to both purity and germination as were believed should be applied to certain kinds of seed for the ensuing year in order that adequate stocks might be secured for the Canadian trade. One of the biggest problems confronting the board is the weed seeds allowable in official grades, and the most important action taken was raising the standard of grade No. 1 alsike, white clover, domestic red clover, alfalfa and brome grass seeds, which must now be free from primary noxious weed seeds. Bladder campion, white cockle, and couch grass are now classed as primary noxious.

Trade representatives stated that they would be prepared to pay a premium for certified seed relatively free from noxious weeds and suitable for cleaning to grade No. 1, and suggested that the Seed Branch institute inspection of alsike fields. This field inspection is being done in Alberta with Grimm alfalfa for registered seed, with Variegated alfafa in Ontario, red clover in Ontario and Quebec, brome grass in Manitoba to certify its freedom from couch grass, brown top in Prince Edward Island to certify its freedom from red top, and Garnet and Reward wheat in the prairie provinces to certify them true to variety.

Standards were considered for Registered seed of wheat, oats, barley, rye, corn, flax, field peas, and soya beans. The old grades were Registered and Extra No. 1, and these have been changed by amendment of the Seeds Act to Registered No. 1, Registered No. 2, and Registered No. 3. These three grades must show 99·99 per cent purity of variety and be free from primary noxious weeds. The reason for adopting a third grade was to provide a place for off-colour, weathered seed which is equal in purity of variety to the higher grades.

Standards for commercial grades of cereals show only one change, the raising of grade No. 3 for maximum primary and secondary noxious weed seeds per pound from 20 to 15. Consideration was given to doing away with grade No. 3, but it was decided to make a further study of the matter for another year. The standards for turf grasses were raised with respect to noxious weeds and somewhat lowered respecting weeds not injurious in lawns.

On the recommendation of the Saskatchewan Seed Board, darnel was put in the secondary noxious weed group. It had become too troublesome to be classed with " Other Weeds".

The importation regulations in respect to colouring red clover seed grown in the United States, and alfalfa seed grown in the States bordering on Canada and in Utah, Wyoming or South Dakota, were amended to change the colour from orange to navy blue. The purpose is to overcome the confusion caused by the similarity of the orange and red colours, the latter being used to designate imported seed produced in southern countries.

British Columbia interests gave notice of motion to make compulsory the selling of field root and vegetable seeds under grade, and also the marking of the container with the percentage germination. Grades are now provided, but their application is optional.

The question of checking the distribution of weed seeds resulting from the use of feed grain for seed purposes was brought to the attention of the Board by a representative of the seedsmen, and the suggestion was made that buyer and seller be required to give an affidavit covering the use to which the grain is to be put. This matter will receive further consideration at the next meeting.

Control measures included under the Seeds Act prohibit the use of false or spurious names and misrepresentation as to variety or description of seeds or plants in any form of advertising or otherwise. Variety names generally employed in Canada during the year ending March 31, 1923, are allowed, and provision is made for licensing new variety names on the basis of a report made

by any plant specialist designated by the minister. During the year the following new variety names for the kinds specified were licensed for general use in Canada:—

Kind of Seed	Variety Name
Barley	Trebi
	Velvet
Beans	The Princess
	The Peerless
Broccoli	Early Roscoff
Brussels Sprouts	Fillbasket
Leek	Acquisition
Lettuce	Arctic
	Spring Beauty
Oats	Marvellous
Onion	Mountain Danvers
Peas	Director
Potato	Confederation
	Early Norfolk
	White Jewel
Swede	Bronze Top
Tomato	Essex Wonder
	Every Day
Wheat	Ceres
	Pelissier

Progress is being made in establishing standard varietal descriptions and type photographs of field roots and garden vegetables. Investigations to date would indicate that as a result of the variations shown in field tests of the so-called same variety of some kinds, it will be impossible to arrive at anything definite with respect to these varieties until Elite stock seed has been produced. This applies particularly to vegetables. When stock seeds are multiplied, Canadian-grown vegetable seeds should be even more popular than at present. Their adaptability to Canadian conditions, combined with genuineness of stock and trueness to variety names, should increase their demand and cause this seed to command a premium in the market. A survey of vegetable seed production in the Pacific coast states was made by the Chief of the Seed Division. Information was gathered on the growing and cleaning of these seed crops which has been of assistance to vegetable seed growers and has served as a guide in preparing seed importation regulations under the Seeds Act.

SEED GRADING

The grading of practically all seeds to be sold for seeding purposes constitutes an important part of the seed control work, and requires the services of a large staff of inspectors during the season when seed stocks are being assembled and cleaned at central plants and on growers' premises. A seed grader also operates at each district office where large numbers of official, control and customs samples are received. The wide domestic and export trade in seeds makes it imperative that all grading be done uniformly, and in order that standards of quality for each season may be made with a full knowledge of available seed supplies and requirements, one officer exercises general supervision over seed grading in the several inspection districts.

Careful attention was given to providing for all kinds of seed suitable minimum quality standards that would be applicable in all parts of the country. There was also the problem of fitting in the additional grade for registered seed. The third grade proved to be an advantage since it enabled a more consistent classification of the seed from registered crops. The new grade nomenclature also conveys to the purchaser a clearer conception of relative quality.

Prior to this season, standard type samples based on the general quality of seed of the kind, as influenced by climatic and seasonal conditions, were selected and approved for use in grading practice. While the system had given satisfactory results, there was great difficulty in procuring many standards to meet

the wider application of grading, and changes were made in grading work by giving attention to more factors of quality which are believed to have a direct bearing on seed value. A new system has been developed whereby the factors which determine seed value are enumerated and defined so that they may be applied on a percentage basis. With a stated maximum percentage for each class of defect or injury which may be allowed for each grade, and with the work of the inspectors doing seed grading carefully co-ordinated, it is considered that seed grading is now done more consistently and uniformly, and recognition is given to actual seed value.

The grading of seed for commerce on the basis of control samples received at our district offices continues to increase in volume. The growth of work in Manitoba and Saskatchewan necessitated the opening of a district office at Saskatoon, from which point the seed inspection and grading service was provided from January 1, 1929.

Control sample certificates are issued in the names of the senders of the samples, and are the authority for offering the seed lot represented by the sample for sale under the grade name stated on the certificate. The full responsibility of sampling the seed lot purported to be represented by the control sample rests with the sender, and in making sales he must maintain the quality up to the standard of the control sample. As indicating the volume of work and responsible duties, involved in grading agricultural seeds and in checking seed importations, it may be stated that 66,880 samples were recorded, tested and graded at inspection points during the year, and that the total amount of seed represented by these samples would be a very large part of Canada's annual seed requirement of cereal grains estimated at 80,000,000 bushels, and of grass and clover seed estimated at 10,500,000 pounds.

The quality of seeds of the source and kind listed in the following table, and represented by control samples, is indicated by the percentages coming within the several grades. A separate division is made of the factors "purity" and "germination", and the sources of origin are indicated by the percentages stated under the headings Farmers, Merchants, and Institutions.

Kind of Seed	Source			Purity				Germination			
	Farmers	Merchants	Institutions	No. 1	No. 2	No. 3	Rejected	No. 1	No. 2	No. 3	Rejected
	%	%	%	%	%	%	%	%	%	%	%
Alfalfa	30·0	62·4	7·6	34·1	30·0	24·9	12·0	86·9	4·7	4·8	3·6
Alsike	20·0	72·2	7·8	21·6	31·4	28·6	18·4	93·4	3·0	2·4	1·2
Barley	77·5	12·7	19·8	38·8	12·8	13·4	35·0	86·1	4·4	5·0	4·5
Bent grasses	64·4	28·8	6·8	31·8	26·0	19·4	22·8	64·4	15·0	10·3	10·2
Blue grass	1·5	95·0	3·5	35·1	25·0	13·6	6·3	88·4	6·3	3·9	1·4
Brome grass	38·6	48·2	13·2	53·0	27·0	12·8	7·2	84·7	6·9	4·9	3·5
Buckwheat	52·5	44·3	3·2	38·8	7·4	27·0	26·8	84·0	2·0	6·0	8·0
Corn (field)	16·0	74·3	9·7	79·0	8·5	5·5	7·0	79·6	6·6	5·4	8·4
Flax	71·1	12·3	16·6	45·0	12·6	11·4	31·0	67·0	10·4	5·6	17·0
Grass mixtures	10·7	88·0	1·3	46·0	37·0	5·3	11·7	77·3	12·0	2·7	8·0
Meadow fescue	23·7	68·4	7·9	59·4	15·5	13·9	11·2	84·0	8·0	8·0	.....
Millet	18·6	80·0	1·4	27·1	25·4	22·1	25·4	84·6	3·2	5·2	7·0
Oats	73·2	12·0	14·8	26·9	15·8	16·4	40·9	80·6	4·9	6·0	8·5
Peas (field)	36·0	58·3	5·7	76·5	17·0	4·2	2·3	91·0	5·0	3·5	0·5
Red clover	63·5	33·6	2·9	34·3	31·6	19·0	15·1	85·6	4·2	5·9	4·3
Red top	2·9	94·2	2·9	66·3	16·3	12·2	5·2	96·7	.....	1·3	2·0
Rye	53·0	30·2	16·8	30·0	13·1	22·0	16·9	76·5	3·4	10·0	10·1
Sunflower	14·6	82·2	3·0	50·0	13·5	13·5	23·0	56·0	12·2	17·0	14·8
Sweet clover	49·1	44·5	6·4	38·1	33·7	18·2	10·0	78·0	5·5	9·5	7·1
Timothy	53·9	43·2	2·9	21·2	44·3	19·5	15·0	93·5	2·4	2·0	2·1
Vetches	40·0	53·1	6·9	60·0	21·6	16·6	1·8	93·6	1·3	2·5	2·5
Western rye grass	53·7	30·1	16·2	59·5	15·5	14·0	11·0	78·7	8·1	8·0	5·2
Wheat	81·0	8·6	10·4	29·0	16·8	18·9	35·3	59·9	12·8	17·4	19·9
White clover	7·8	73·7	18·5	29·2	26·2	27·6	17·0	79·0	6·0	7·2	7·8

Kind of Seed	Farmers	Merchants	Institutions	No. 1	No. 2	No. 3	Below minimum
	%	%	%	%	%	%	%
Beans	10·6	85·7	3·7	85·4	2·9	3·7	8·0
Beet	2·2	97·8	.....	78·2	9·7	3·4	8·7
Cabbage	2·0	96·0	2·0	64·6	9·2	6·9	19·3
Carrot	.....	100·0	.....	37·9	34·7	17·8	9·6
Cauliflower	.....	100·0	.....	60·0	16·0	16·0	8·0
Celery	.....	96·0	4·0	52·0	24·0	8·00	16·0
Corn (garden)	20·4	75·4	4·2	76·7	10·4	5·9	7·0
Cucumber	.....	100·0	.....	92·6	4·4	.....	3·0
Lettuce	1·5	98·5	.....	81·5	7·8	6·1	4·6
Mangel	8·5	88·0	3·5	62·8	15·0	9·8	12·4
Melon	.....	100·0	.....	57·0	35·0	3·0	5·0
Onion	10·7	89·3	.....	74·0	1·4	7·6	17·0
Parsley	.....	100·0	.....	36·8	15·8	10·6	36·8
Parsnip	13·5	81·0	5·5	54·0	5·4	19·0	21·6
Peas (garden)	8·5	78·0	13·5	87·7	4·6	2·6	5·1
Pumpkin	.....	66·4	33·6	87·0	4·3	4·2	4·5
Radish	.....	100·0	.....	87·0	1·3	5·3	6·4
Rape	36·0	61·0	3·0	81·5	.....	.....	18·5
Spinach	.....	100·0	.....	56·4	18·0	11·5	14·1
Squash	.....	100·0	.....	80·0	6·6	.....	13·4
Tomato	3·4	96·6	.....	84·0	3·4	6·8	5·8
Turnip	4·4	91·1	4·5	71·5	10·1	5·7	12·7

Vegetable seeds with germination below a certain minimum must be labelled to show the actual germination.

The service of inspection, grading and sealing of seed lots in containers is also making an increased demand on the time of the inspection staff. For seed so graded and sealed a Seed Inspection Certificate is issued. This certificate is defined as "A certificate given by an inspector on seeds sampled, examined, graded and sealed by him, or under his direction." Every seed lot accepted to grade Registered No. 1, Registered No. 2, or Registered No. 3 was derived from a seed crop for which a Crop Registration Certificate was issued by the Canadian Seed Growers' Association. A seed lot graded and sealed in the sack as No. 1, No. 2, or No. 3 was produced from an inspected seed crop found to conform to official standards of purity of variety, trueness to type, and freedom from noxious weeds. There were inspected and graded at central cleaning plants and on growers' premises the following kinds and quantities of seed:—

Kind of Seed		Reg. No. 1	Reg. No. 2	Reg. No. 3	No. 1	No. 2	No. 3
Wheat	bush.	31,572	52,767	34,021	14,839	3,992	230
Oats	"	33,280	34,098	17,823	118,257	37,901	7,682
Barley	"	5,052	9,275	3,454	3,679	.....	.....
Rye	"	.....	.....	550	.....	.....	.....
Peas	"	116	.....	.....	.....	.....	.....
Flax	"	1,727	870	.....	1,204	.....	.....
Velvet bent	lb.	.....	.....	.....	.....	.....	100
Swede turnip	"	650	.....	.....	.....	.....	.....
Alfalfa	"	4,338	9,673	1,255	.....	.....	.....
Sweet clover	"	12,031	3,336	1,385	.....	10,700	.....
Brome grass	"	.....	.....	.....	122,494	1,990	.....
Western rye	"	.....	.....	.....	46,554	2,300	.....
Browntop	"	.....	.....	.....	8,079	7,148	13,230

Regulations which govern the importation of seeds have a very important bearing on Canadian seed supply. They are applied in co-operation with customs officials so that no serious inconvenience is caused to importers. They embody control measures equivalent to those of other countries, and their operation precludes the admission of seed of a quality which could not be legally

sold in the country of origin. During the year 14,689,641 pounds of seed were entered at customs ports under these regulations. The following table includes the principal kinds and quantities of each, with countries of origin:—

Kind of Seed	United States	British Isles	New Zealand	Holland	Germany	France	Denmark
	lb.	lb.	lb.	lb.	lb.	lb.	lb.
Alfalfa	230,237						
Asparagus	338	16		16		4	
Barley	24,900	380					
Beans	39,100						
Beans (garden)	376,935	17,647		2,780		628	17,171
Beet (garden)	20,693	26,058		5,551	110,230	39,424	
Beet (sugar)	66,082	2,200		594	392,134	600	150
Bent (grass)	13,085	322	3,600	25,745			
Blue grass	155,619						
Brome grass	49,680						100
Buckwheat	840						
Cabbage	2,396	2,379		2,925		448	2,466
Carrot	41,935	1,959		3,163		948	4
Cauliflower	218	58		565		14	393
Celery	687	42		109		78	
Corn (field)	923,918						
Corn (garden)	1,548,500						
Corn (pop)	10,069						
Cress	99	391		1,537		1,624	
Crested dog's tail		56	3,349	700			200
Crimson clover	600						
Cucurbits	28,524	2,083		559	10,000	632	
Fescues	21,256	5,029	146,175	7,150	4,900		
Flax	5,600						
Hemp	200						
Herbs	835	792		305		77	
Italian rye grass	3,067	1,404	6,680				
Leek	339	342		11		35	105
Lettuce	2,165	118		433		281	
Mangel	8,797	114,458		2,435		8,490	175
Millet	749,000						1,000
Oats	823	40,773					
Onion	40,306	1,839		447		314	
Orchard grass	9,114	14,542		200			11,300
Other grasses	9,601	6,170	560	1,300			500
Parsnip	6,864	3,364		1,653		75	5
Parsley	659	1,215		1,033		9	2,138
Peas (field)	28,856						
Peas (garden)	531,724	111,973					
Pepper	244	3		65		12	
Perennial rye grass	3,463	62,052	33,290	700			7,600
Radish	11,301	11,670		10,902		2,026	5
Rape	7,344	8,158		104,950	1,600		
Red clover	220,814	1,260,679			66,077		
Red top	214,880						
Rye	800						
Sage	29	21				15	
Salsify	446	6		120		13	
Savory	147	269		104		14	
Sorghums	91,622	1,000					
Speltz	1,760						
Spinach	9,791	11,204	301	18,742		50	400
Sunflower	91,622	1,000					
Sweet clover	38,719						
Swiss chard	371	191		204			
Timothy	5,835,585						
Tomato	2,944	44		6		6	
Turnip (field)	235	42,182		5,795		21	50
Turnip (garden)	6,804	36,041		6,884		7	
Vegetables (other)	563	1,841		572	187	167	73
Vetches	81,586	130,204			3,074		
Wheat	16,165	64		115			
White clover	48,530	22,456		442			

Switzerland supplied 2,305 lbs. onion seed and 150 lbs. cauliflower seed; Japan 1,705 lbs. radish seed; Italy 20 lbs. onion, 6 lbs. tomato and 4 lbs. pepper seed; and China 540 lbs. vegetable seeds.

Investigational work in co-operation with officials of the Cereals Division, Experimental Farms Branch, was continued to obtain data on the relative value of seed representing a wide range of physical quality. This information will indicate the importance which should be attached to suspected injury, and will be incorporated into seed grading practice.

SEED PRODUCTION

It is generally conceded that the best seed for Canadian conditions is that produced in our own country. The Seed Division co-operates with the provinces in conducting field crop competitions, combined seed crop and clean seed competitions, seed fairs, and provincial seed exhibitions, and makes subvention payments to the provincial Departments of Agriculture. Some changes were made in the plan for the payment of these subventions in 1926, and the maximum amount made available from the Seed Branch appropriation for each of the competitions is shown as follows:—

Standing field crop competition	$ 50 00
Combined seed crop and cleaned seed competition	200 00
Local seed fair	50 00
Provincial seed fair	600 00

The total amount of subvention must not exceed $1,200 to each province having less than one million acres under field crops, and $1,200 *pro rata* for each additional milion acres under cultivation in field crops, provided that the total subvention to which any province is entitled shall not exceed $1,200 *pro rata* per 100,000 of total population.

Provincial Departments of Agriculture are paid these subventions up to one-half of the prize money actually paid by the provinces. The payments are governed by regulations which have been amended from time to time for the purpose of improving the quality and increasing the quantity of the seed supply. Several millions of bushels of improved seed are produced annually as a result of these competitions and seed fairs.

From 1912 until 1926 subventions were paid by the Federal Department on the basis of two-thirds of the prize money, but with the revision of regulations requiring registered seed stocks for the combined seed crop and cleaned seed competitions, the Seed Branch has performed the inspections, the organization and other judging expenses being borne by the provinces. The total expenditures as paid by each province and the Dominion have thus been approximately on a fifty-fifty basis.

The amounts paid by the Seed Branch to the provinces during the fiscal year were as follows:—

	Standing field crop competitions		Combined seed crop and cleaned seed competitions		Local seed fairs	
	No.	Amount	No.	Amount	No.	Amount
		$ cts.		$ cts.		$ cts.
Prince Edward Island						
Nova Scotia	9	344 00				
New Brunswick			4	199 00		
Quebec			58	5,305 00		
Ontario	126	7,570 00	30	3,772 50		
Manitoba						
Saskatchewan	33	1,014 00	24	3,040 00	45	1,302 13
Alberta	6	208 75	9	797 50	18	660 80

—	District seed fairs		Provincial seed fairs		Seed cleaning machines		Other projects Amount
	No.	Amount	No.	Amount	No.	Amount	
		$ cts.		$ cts.		$ cts.	$ cts.
Prince Edward Island			1	162 88			
Nova Scotia			1	162 89	2	316 82	
New Brunswick			2	298 08			
Quebec			1	600 00			1,755 92
Ontario	2	300 00	2	965 56			
Manitoba					1	200 00	1,000 00
Saskatchewan			2	1,076 50			
Alberta			1	1,213 13	1	610 30	

While amounts of subventions shown were paid during the fiscal year, such amounts were not all due on account of seed fairs and crop competitions held or conducted during that time. Some payments were made in the case of delayed subvention claims in order that all such claims might be brought up-to-date, and because amounts actually due these provinces had not previously been used.

In the case of British Columbia an annual grant of $2,500 is paid towards encouraging the production and marketing of field root and garden seeds. The provincial Department of Agriculture authorizes the expenditure of an equal amount for this purpose.

The production of high grade seeds in Canada is steadily increasing in importance. Canadian-grown seeds command recognition on foreign markets by virtue of their inherent qualities of winter hardiness and vigour of growth, and because our standards of quality for graded seeds of all kinds are so highly regarded. Stocks of high class seed of wheat, oats, barley, alsike clover, sweet clover, brome, Canadian blue, and browntop were available for export last year. There was a gratifying increase in the production of timothy seed in Alberta. One million pounds were produced in the Pincher Creek district in 1928, 75 per cent of which graded No. 1. In British Columbia the yield was somewhat less than the previous year. Average imports of this seed are about 7,500,000 pounds annually, but with further encouragement Canadian production will soon be equal to our requirements. Alfalfa seed showed a decrease in production due to adverse climatic conditions. Only enough seed was produced, together with the carry-over from the previous year, to meet home needs. Red clover seed production in Quebec, Ontario and British Columbia is increasing from year to year, due to encouragement given by the Dominion and provincial Departments of Agriculture and the demand for hardy, home-grown seed. Alsike seed production in the older districts of Ontario is keeping up in quantity, but not in quality. The newer districts of Ontario, Quebec and British Columbia are producing small supplies of cleaner seed. Tests are being conducted in northern Manitoba and Saskatchewan to determine if alsike seed can be produced profitably in large areas now free from troublesome weeds. Wild white clover seed obtained from England has been distributed throughout Canada for tests in connection with seed production and permanent pasture purposes. Results so far indicate that it is a valuable permanent pasture crop in the central provinces. Browntop or Rhode Island bent, velvet and creeping bent grass seeds are produced in Prince Edward Island and Nova Scotia, and creeping red fescue and velvet bent grass in Alberta. Field root and garden vegetable seed production is making progress in British Columbia.

ASSISTANCE TO CANADIAN SEED GROWERS' ASSOCIATION

The Canadian Seed Growers' Association is a national organization of farmers who specialize in the production of registered seeds. They multiply for commerce the foundation stock seeds called "Elite Stock Seed" produced by Dominion and provincial experiment stations and sometimes by private growers. The association office functions as a registration bureau for seed crops, directs the work of the growers, and publishes a seed catalogue. Registered seed provides much of the seed stocks for field crop competitions, local seed fairs and provincial seed exhibitions. Complete information as to the work of the association may be obtained from their annual report. Financial support from the Seed Branch was continued during the past year to the extent of $13,000.

EXHIBITS

An exhibit was made at the Royal Winter Fair, Toronto, the work of the Branch was demonstrated, and literature was distributed to interested parties. The operation of seed cleaning machinery attracted wide interest amongst the farmers. This exhibit was repeated in a smaller way at fairs in Eastern Canada, including the Provincial Seed Exhibition and Dairymen's Convention, Fredericton, N.B., the Provincial Seed Exhibition, Rimouski, P.Q., and the District Seed Fairs at Almonte and Belleville, Ontario.

FEED DIVISION

Under the provisions of the Feeding Stuffs Act 226 manufacturers registered 848 brands of commercial feeding stuffs during the registration year ending September 30, 1928. These registered feeds may be classified according to their nature or trade designations as follows:—

Animal products	101
Barley products	8
Beet pulp (dried)	8
Brewers' and distillers' products	18
Buckwheat products	1
Calf meals	32
Cocoanut products	3
Corn products	11
Cottonseed meals	23
Cattle feeds	63
Fish products	16
Horse feeds	4
Linseed meals and cakes	18
Milk products	1
Oat products	18
Peanut products	1
Pig feeds	27
Pigeon feeds	8
Poultry mash feeds	283
Poultry scratch feeds	83
Rabbit feeds	6
Rice products	6
Screenings and scalpings	31
Sheep and goat feeds	5
Soya bean products	5
Miscellaneous mixed feeds	59
Miscellaneous unmixed feeds	9

Since the Feeding Stuffs Act became law in 1921 there has been a notable increase both in the number of commercial feed manufacturing concerns and in the number of brands of feed produced. This increase is indicated in the following table comparing figures for the registration years 1923-24 (since when wheat mill feeds containing screenings could not be registered and sold as commercial feeding stuffs) and 1927-28.

NUMBER OF COMMERCIAL FEED MANUFACTURERS AND BRANDS OF FEED REGISTERED

Province	1923-24 Mfgrs.	1923-24 Brands	1927-28 Mfgrs.	1927-28 Brands	Increase Mfgrs.	Increase Brands
Alberta	14	30	26	53	12	23
British Columbia	31	115	44	174	13	59
Manitoba	10	23	8	26	−2	3
New Brunswick	2	2	2	4	0	2
Nova Scotia	2	6	2	4	0	−2
Ontario	85	319	95	453	10	134
Prince Edward Island			1	1	1	1
Quebec	18	54	19	78	1	24
Saskatchewan	3	8	6	11	3	3
Foreign	23	37	23	44	0	7
Totals	188	594	226	848	38 20·2%	254 42·7%

Legislative control, trade competition, and more intelligent buying have had a beneficial influence on the quality and suitability of commercial mixed feeds placed on the market at the present time as compared with earlier periods. The earlier tendency on the part of many mixed feed manufacturers was to compound formulae calculated primarily to provide a market outlet for their manufacturing offal. The present trend is towards the production of feeds suitable for a given purpose. That a number of manufacturers who formerly produced but one grade of dairy feed are now compounding several grades to supplement the varying types and qualities of roughages produced on different farms and in different areas of the country, is one evidence of this. The price range in these different grades, based mainly on the protein content, serves also as an object lesson in the economies which may be effected through farm production of protein-rich leguminous fodders.

In order to check commercial feeding stuffs and wheat mill feeds for compliance with the guarantees and standards of quality and purity required by the Act, 6,755 inspection visits were made during the year, and 1,830 samples were collected from manufacturing plants, wholesale and retail dealers, and submitted for analysis. A number of firms were required to improve the composition of their feeds to meet the guaranteed analyses or to re-register under lower guarantees. A contention of some manufacturers, that certain protein deficiencies in their mixed feeds or wheat by-products were attributable to the relatively low protein content of the 1927 western wheat crop, is given some support in the results of analytical tests made at the Winnipeg Grain Research Laboratory.

The popularity of wheat bran, shorts and middlings with all classes of feeders, and the good export demand from the United States, have kept these products at consistently high price levels during recent years. A tendency on the part of many feeders to exhaust their supply of home-grown grains before purchasing supplementary feed requirements brings a peak demand for mill feeds during the spring months before pastures become available. Accordingly under average conditions mill feed prices are highest at this season of the year and usually reach their lowest levels during August and September. The spring of 1929 was a notable exception to this rule, due apparently to the relatively low price at which feed wheat has been available. Charts to illustrate these seasonal price trends were prepared and used in exhibits at fairs and in addresses at farmers' meetings.

Investigations have been conducted with a view to the more satisfactory standardization of the better quality offal obtained in the milling of rolled oats. The limits of variability in the present standard for oat middlings are too broad, and the wide range in both the quality and the price of this product as found on the market has proved disturbing to manufacturers as well as to purchasers.

ELEVATOR SCREENINGS

The following table shows the quantities and distribution of the various classes of unground screenings cleaned from the western grain crop at terminal elevators at Fort William and Port Arthur during the crop years 1926-27 and 1927-28. To these figures should be added for the latter year about 125 tons of Standard Recleaned Screenings, 1,157 tons of Oats Scalpings, 417 tons of Elevator Screenings, and 1,900 tons of Refuse Screenings, which were ground at the head of the lakes.

Consigned to	Fiscal year	Standard recleaned screenings	Oats scalpings	Elevator screenings	Refuse screenings
		tons	tons	tons	tons
Fort William District	1926-27	108	177	206	39
	1927-28	65	10	80	.....
Eastern Canada	1926-27	23,968	51,687	264	57
	1927-28	19,181	27,406	28	.....
Western Canada	1926-27	207	34	585	1,935
	1927-28	1,757	.....	.....	175
Exported	1926-27	.....	17,236	2,633	76,099
	1927-28	.....	36,406	1,800	54,490
Totals	1926-27	24,283	69,134	3,688	78,130
	1927-28	21,003	63,822	1,908	54,665

The general picture presented by these figures has not changed greatly during the past several years. The total quantity of screenings shipped from Port Arthur and Fort William elevators during the crop year 1927-28 was about 34,000 tons less than for the previous year, and 19,000 tons under 1925-26 shipments. It would seem that this fluctuation in the quantity of dockage found in western grain is largely the result of seasonal influence. Weather conditions which delay harvest operations and prevent sufficient late fall and early spring cultivation are favourable to the production of weeds in the succeeding crop.

Feeding trials conducted at the Central Experimental Farm in 1915 showed that the fine black seeds contained in uncleaned dockage or screenings rendered it unpalatable and unsuitable for feeding purposes. Following these findings, and since the estbalishment of conventional standards for screenings, it has become the general practice at terminal elevators to clean the dockage. It is significant that uncleaned and Refuse Screenings find practically no demand in Canada, while Standard Recleaned Screenings and Oats Scalpings are in ready demand in Eastern Canada at prices not greatly lower than those for feed grades of grain. The following table has been prepared to compare price quotations per ton of the various classes of screenings with those for feed wheat, oats and barley, and also shorts.

—	Feed wheat	No. 1 feed oats	Standard feed barley	Shorts	Whole standard recleaned screenings	Whole oat scalpings	Elevator screenings	Refuse screenings
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
April, 1928	36 00	39 54	36 60	35 00	30 00	30 57	18 00	17 00
May, 1928	34 30	39 40	36 07	34 00	30 00	32 34	19 00	18 00
June, 1928	30 97	33 81	35 86	32 00	30 00	29 40	18 00	17 00
July, 1928	28 64	33 22	30 85	32 00	25 00	27 05	10 00	9 00
August, 1928	26 97	28 22	25 85	31 00	24 00	20 58	9 00	8 00
September, 1928	27 30	28 81	25 85	31 00	20 00	18 82	7 00	6 00
October, 1928	24 80	31 02	24 91	30 00	21 00	20 58	8 00	6 00
November, 1928	24 64	28 22	23 77	30 00	20 00	18 23	7 00	5 00
December, 1928	23 31	28 22	23 14	30 00	19 00	17 64	8 50	6 50
January, 1929	24 30	29 40	25 85	30 00	19 00	18 23	9 00	7 00
February, 1929	27 14	31 75	28 56	28 00	20 00	20 58	9 50	7 05
March, 1929	26 47	30 87	28 35	28 00	20 00	19 40	9 00	7 00

MEDICATED STOCK SALTS

It is evident from the numerous complaints received and investigated that the activities of manufacturers of medicated stock salt are increasing, and that misrepresentation and fraud are too commonly employed to put these products on the market at prices quite out of proportion to their worth. A need for control measures designed specifically to regulate the sale of such products is indicated. Most of the samples examined consist principally of common salt, with small quantities of charcoal, iron, and other colouring, condimental or medicinal ingredients. Either directly or by implication some of these products are claimed not only to be wonderful aids in the production of flesh, milk, eggs, etc., but also to prevent or cure such diseases as tuberculosis and contagious abortion.

Some novel methods of effecting sales and collections are employed. Most common is the issuance of "indemnity" or "health" guarantees according to which the manufacturer guarantees to indemnify or reimburse the purchaser who uses the material according to directions for specified periods of time for loss of stock due to contagious disease. Since such guarantees are officially recognized as insurance contracts, a number of cases have been brought to the attention of the Director of Insurance. With their headquarters in foreign countries, the usual experience is that these firms are out of business before they can be traced down. They appear to conduct short, high-pressure sales campaigns, then disband and reorganize under new company names to repeat the same process. Their usual method of making collections lends itself to this practice. Part cash is accepted at the time of sale and a note taken for the balance. This note is discounted by a third party or concern, which makes collections but disclaims any responsibility for the quality of the goods. In more than one instance collusion between this third party and the manufacturer has been established in the courts.

HAY AND STRAW INSPECTION

The following table shows the quantities and grades of hay and straw inspected in accordance with the provisions of the Inspection and Sale Act:—

Kind	No. 1	No. 2	No. 3	No grade	Shipping grade	Rejected
	tons	tons	tons	tons	tons	tons
Timothy	140	2,858	674	327	43	285
Dyke	15	588	.....	.....	.....	.....
Mixed	74	99	243	35	.....	63
Totals	229	3,545	917	362	43	348
Straw	.....	57	.....	74	.....	15

Fees totalling $1,038.38 were collected for this service, of which amount $276.80 was retained by certain inspectors whose only remuneration is the prescribed fee, and the balance was deposited to the credit of the Receiver General.

The 1928 hay crop was somewhat lighter than that of the previous year, but considerably above the average crop for the past five years. Unfavourable curing conditions resulted in much weathered hay being stored in some of the principal producing areas of Eastern Canada. Exports were light, but the domestic demand was somewhat more active. Prices maintained low levels. In both domestic and export markets top grades commanded substantial premiums over inferior qualities, which for the most part found slow sales at heavy discounts.

Markets and Fertilizer Division

The increasing public interest in marketing problems has resulted in rapid expansion in the service of this Division. Information in regard to practically all phases of marketing the commodities under control is gathered and made available to the interested public through market reports and correspondence.

MARKETS IN 1928

The seed market was generally satisfactory to growers. Good quality red clover, alsike and alfalfa seed and registered seed grain were in strong demand at relatively high prices. On the other hand, timothy, bluegrass, western rye and brome grass were in only fair demand and sold at average prices. Sweet clover was a drug on the market.

Seed of good quality usually finds a profitable market, but unfortunately a large percentage of the 1928 crop was inferior in purity and general quality, and not wanted in any market. Prices obtained by the growers for this inferior seed were disappointing.

High prices prevailed for domestic red clover and alfalfa seed, due to abnormal production and the incresing tendency of the Canadian farmer to demand winter hardy home grown seed. This domestic seed sells at a premium of about 10 cents per pound over the imported seed, which should encourage its production.

Alsike of marketable quality was in demand at good prices in the principal export markets of Chicago and London. Unfortunately the general quality of the Ontario alsike was inferior, owing to adverse climatic conditions during the growing and harvesting period. A large quantity of this inferior seed was threshed, and there was great dfficulty in selling it at any price. The quality standards in these markets are becoming higher each year, and alsike growers and dealers should govern their operations accordingly.

Sweet clover seed was barely saleable at any price, due to overproduction in Canada, and particularly in the United States, which is our only market for surplus sweet clover seed.

The pressed hay market was dull during most of the year, and prices were relatively low. A reduction in export demand caused the market to be very critical in regard to quality, and only the best qualities found ready sales.

Millfeeds, including bran and shorts, and Standard Recleaned Screenings were in good demand at slightly higher prices than in the previous year. Grain of feed grades was cheaper. This was no doubt due to the heavier export demand for millfeeds, and the large grain crop in the prairie provinces.

The commercial fertilizer market was quite active, prices being slightly higher for phosphates and lower for nitrogen. Potash prices remained about the same.

Average Wholesale Prices in Canada

		1927	1928
		$ cts.	$ cts.
Domestic No. 1 red clover seed	per pound	0 34	0 35
Domestic No. 1 alsike seed	"	0 33	0 28
Domestic No. 1 alfalfa seed	"	0 24	0 36
Domestic No. 1 timothy seed	"	0 08	0 10
Bran	per ton	32 00	34 00
Shorts	"	34 00	36 00
Oats, No. 1 Feed	per bushel	0 59	0 57
Barley, No. 3 C.W.	"	0 90	0 85
Feed wheat	"	1 21	1 06
Pressed hay, Mixed No. 1	per ton	12 00	10 50
Sulphate of ammonia	"	60 00	58 00
Superphosphate	"	21 00	24 00
Muriate of potash	"	48 50	48 00

MARKET REPORTING

The following phases of this service are provided:—

(*a*) The publication, in English and French, of an eight-page report printed bi-weekly and entitled Seed, Feed and Fertilizer Markets.

(*b*) The preparation of monthly statements regarding markets for publication in the Bulletin of Agricultural Statistics, and the Canada Year Book issued by the Dominion Bureau of Statistics.

(*c*) The preparation of weekly statements for publication by the press.

(*d*) Correspondence in which information is given farmers and the trade regarding prices and market prospects.

In each issue of the pamphlet Seed, Feed and Fertilizer Markets there are about 900 price quotations of 216 items. In addition detailed statements of exports and imports are given by provinces. The latter information is procured from the Statistical Branch of the Department of National Revenue.

The correspondents reporting the condition of domestic markets are representatives of wholesalers, jobbers, retailers and farmers who have a definite interest in the trade of the commodities reported. The prices and other information provided by them are based on the grades or qualities defined in the Acts which control the sale of the various commodities. Prices and information from foreign markets are based on the respective grades and qualities recognized in the various countries, and are secured by the co-operation of the Canadian Government Trade Commissioners and wholesale dealers in those countries.

Cable reports are obtained from the following countries: Great Britain, France, Germany, Belgium, Holand, Denmark, Czecoslovakia, Italy, Argentine, Chile, and New Zealand. Almost daily communication is maintained with the Bureau of Agricultural Economics, Washington, D.C., regarding markets in the United States.

During 1928 about 7,100 English and 5,100 French copies of the pamphlet Seed, Feed and Fertilizer Markets were distributed bi-weekly to farmers, correspondents and officials. The information was widely quoted by the general press as worthy of interest to their readers.

The effect of this service is seen in greater public demand for the higher grades and qualities of the commodities reported, and in the levelling of prices according to freights and other distribution charges throughout the country. The reports also serve as a price guide to seed and feed producers when placing their products on the market. The feed quotations permit the live stock producer to figure comparative costs of rations for current use.

FERTILIZERS

The administration of the Fertilizers Act was not attended by any special features. For the most part the trade has adjusted itself to the restrictions imposed, and farmers continue to express their appreciation of the protection afforded.

REGISTRATIONS IN 1928

—	Firms	Registrations
Price Edward Island	1	3
Nova Scotia	4	30
New Brunswick	3	5
Quebec	4	21
Ontario	14	158
Manitoba	1	1
Saskatchewan	0	0
Alberta	1	15
British Columbia	8	33
Great Britain	3	3
United States	12	93
	51	362

The 362 brands may be classified as follows:—

1. Mixed fertilizers complete		243
2. Mixed fertilizers containing only two of the three plant foods—		
(a) Nitrogen and phosphoric acid	52	
(b) Phosphoric acid and potash	45	
		97
3. Fertilizers containing only one of the three plant foods but not exempt from registration under the Fertilizers Act		21
4. Miscellaneous		1

In addition to registered fertilizers, there were on the market basic slag and fertilizer chemicals, such as nitrate of soda, sulphate of ammonia, superphosphate and muriate of potash, which are exempt from registration.

ADMINISTRATION

Inspectors drew 981 samples, of which 890 met the guaranteed analysis directly or by compensation, and 91 were found to be deficient. Seven prosecutions were conducted and numerous warnings were given for first and minor offences. Incorrect labelling and abuses of prescription selling were the principal offences other than failure to meet the guaranteed analysis.

The amendments to the Act, which came into effect on July 1, 1928, and were applied during the autumn trade season, proved generally satisfactory in preventing the sale of questionable fertilizers and salesmanship misleading to the farmers. Complete advantage of the amendments cannot be realized until a micro-analytical service is provided to detect the constituent materials of mixtures and the adulteration of standard materials. Sufficient has been done to indicate that mixtures frequently contain materials other than registered, and that standard materials are sometimes adulterated with substances which cannot be detected by chemical analysis when they are in a mixture.

The results of chemical analyses of samples taken by inspectors were compiled and issued to the public in pamphlet form. The demand for this annual report of analyses comes from all phases of the industry. The careful manufacturer recognizes that it advertises his goods favourably, while the dealer in fertilizers which meet the guaranteed analysis finds the report an aid to making sales. The farmer buyer uses it as a guide when buying, and the published report is effective as a supplement to court proceedings in the enforcement of the Act.

The first duty of those charged with this control work is to protect the farmer by requiring the trade to meet the guaranteed analysis as registered and stated on the tags or bags. Protection is also given to legitimate manufacturers and dealers against those who try to sell fertilizers outside the law.

NEW FERTILIZERS

During 1928 there came on the Canadian market for the first time:—

Milorganite, which is decomposed sewage, dried and ground. It may be classed as an organic fertilizer containing about 5 per cent total nitrogen and 3 per cent total phosphoric acid. A few carloads were imported from the United States.

Nitrochalk, an English nitrogen fertilizer containing about 10 per cent of water soluble nitrogen. It is a mixture of ammonium nitrate and lime.

Synthetic Nitrogen Products of German origin and containing very high percentages of plant food, as follows:—

Calcium nitrate—15 per cent nitrogen, 28 per cent calcium oxide equivalent.
Cal-Nitro—20·5 per cent nitrogen, 35 per cent carbonate of lime.
Calurea—34 per cent nitrogen.
Diammonphos—21 per cent nitrogen, 53·4 per cent available phosphoric acid.

Leunophos—20 per cent nitrogen, 20 per cent available phosphoric acid.
Leunasalpeter—26 per cent nitrogen.
Nitrophoska I.—15 per cent nitrogen, 30 per cent available phosphoric acid, 15 per cent potash.
Nitrophoska II.—16·5 per cent nitrogen, 16·5 per cent available phosphoric acid, 20 per cent potash.
Nitrophoska III.—15·5 per cent nitrogen, 15·5 per cent available phosphoric acid, 19 per cent potash (sulphate).
Nitrophoska IV.—15 per cent nitrogen, 11 per cent available phosphoric acid, 26·5 potash.
Nitrate of potash—11 per cent nitrogen, 44 per cent potash.
Urea—46 per cent nitrogen.

The Maritime District

This district includes the three Maritime provinces, with headquarters at Sackville, N.B., where the district inspection office and seed laboratory are located. In each province a permanent inspector is stationed at a convenient point, where he can work efficiently with the least expense. Besides these permanent inspectors two seasonal inspectors are employed whenever required, especially in the spring which is the busiest season.

SEED PRODUCTION AND SUPPLY

The Maritime provinces were favoured with unusually good weather. Spring was early, with plenty of moisture and sunshine throughout the growing season. This resulted in a much larger yield of seed oats, especially in Prince Edward Island where 60,000 bushels were inspected and shipped out, at a price averaging $1 per bushel, f.o.b. shipping point. Sixty per cent of these oats was shipped to various points in Quebec, where the demand for No. 1 Banner oats, grown in this district, is increasing every year. The balance was shipped to Nova Scotia and New Brunswick; but the market in these two provinces was not as good as usual as the farmers had good crops and most of them used their own seed.

Four seed cleaning centres were organized in Nova Scotia by the provincial Seed Board. Power cleaning machines were bought, the owner paying one-third of the purchase price and the balance shared on a fifty-fifty basis by the Seed Branch and the provincial Government. According to the contract with the owner of each machine the provincial Seed Board has maintained full control of the machine for a period of five years. The charge for cleaning seed is fixed and controlled by the Seed Board. This new policy has taken the place of the seed cleaning train, which was discontinued last year, and splendid results have already been obtained through the installation of these machines. In New Brunswick one of these centres was established by the Seed Board of that province, and if it prove satisfactory the work will be extended next year.

Only 650 pounds of registered swede turnip seed were produced in Nova Scotia this year. The quantity is smaller than last year, due largely to the smaller area planted and unfavourable weather during harvest. In order to increase the production of this seed, for which there is a great demand in this district, another growing centre was organized in Digby county. Fifteen farmers especially well qualified for this particular kind of work were chosen, and each was supplied with a small quantity of registered seed. This work is caried on in co-operation with the agricultural representative of the county.

The estimated quantity of registered seed grain produced was about 7,195 bushels, divided as follows: 50 bushels of wheat, 160 bushels of barley, and

6,985 bushels of oats. Of this quantity 520 bushels of oats and 99 bushels of barley were sealed and sold as registered seed. The price paid for registered oats was practically the same as for No. 1 commercial seed. Under these conditions there is little inducement for a farmer to give the extra care to produce this high class seed. Unless the market is developed for registered seed, whereby the producer will be fairly rewarded for his extra work, progress in this line will be very slow.

The combined seed competitions were continued this year. Inspectors collected 229 samples from the three provinces, which is an increase of about forty per cent over the previous year. The grading of these samples is shown by provinces in the following table:—

—	No. 1	No. 2	No. 3	Rejected
Prince Edward Island	58	11	10	14
Nova Scotia	41	9	3	16
New Brunswick	24	9	10	24

The large number of rejected samples indicates considerable negligence in cleaning; but the quality of the grain, especially the oats, is much better than last year. None of these samples germinated below 85 per cent. The practical results of this competition work are shown by the fact that the large quantity of No. 1 seed oats exported from the island and used in the other provinces was produced by the farmers taking part in these competitions.

There were 200 growers of bent grass seed in Prince Edward Island, and 1,000 acres were inspected. The yield of cleaned and graded seed was 38,000 pounds, of which 10,000 pounds were sold in Canada and the balance in the United States. This is an increase in yield of 10,000 pounds over last year. Because of the change in the Seeds Act regulations from an allowance of 800 to 100 noxious turf weed seeds per ounce, 10,000 pounds of this seed were rejected and 10,000 pounds went to grade No. 2 or No. 3 which would have graded No. 1 last year. A certain loss was experienced by the growers through the severe change in the regulations, but it is thought that they will profit in the future.

SEED FAIRS

A seed fair was held at Amherst in conjunction with the live stock show. The number of exhibits was not large, but the quality in general was good. As a result of complaints made by a number of farmers, to the effect that this seed fair is held too early in the year, it was decided by the Nova Scotia Seed Board to hold it at Truro in the future, where not only farmers but the students of the Agricultural College can attend. In order to give the farmers more time to prepare their exhibits, the seed fair will be held in the winter.

Instead of two or three seed fairs being organized in New Brunswick as in previous years, only one was held at Fredericton in conjunction with the Farmers' and Dairymen's Association meeting. While there were not many exhibits, all were of superior quality.

The Prince Edward Island seed fair was also held during Farmers' Week in Charlottetown, and 100 samples of grain from the combined competitions were on exhibition. The farmers have an opportunity to examine the exhibits, and order their supply of seed based on the quality of the samples which were drawn by the inspector.

INSPECTION

The inspectors visited 1,377 points during the year, making 1,073 visits for seed inspection, 356 for feeding stuffs, 220 for fertilizers, 24 for binder twine, and 309 for hay. The seed visits include the inspection of seed crops to determine the purity of variety, general quality, and freedom from disease. These records are kept on file and are used when the samples of threshed seed are submitted for grade under the law. The information is also made available to the trade as an aid to marketing.

Seed merchants were also visited, but as nearly all the small seeds sold in these provinces are imported or bought from wholesale seed houses, very few violations were reported. A few cars of No. 2 C.W. recleaned oats were sold for seed. There is always a certain number of farmers who will buy inferior seed for a present saving of a few cents. The quantity, however, was considerably less than in previous years.

Twenty-three official samples of feeding stuffs were taken, consisting mostly of chop feeds of local manufacture. The analyses showed that there were no serious violations. As a rule the feeding stuffs sold in the Maritime Provinces are bought from large mills in Montreal and the West, and generally meet the guaranteed analyses.

Practically all materials and mixed fertilizers brought into this district were sampled by our inspectors, mostly at the ports of entry. The samples were analyzed and copies of the certificates were forwarded to the men in whose possession the lots were found. Violations were of minor importance. The new requirement which compels the importer to register his fertilizer before it is shipped into this country, and the holding of the Canadian firm or agent responsible, has already given good results.

Over 2,000 tons of hay were inspected and graded, as follows:—

	Tons
Timothy, No. 1	60
Timothy, No. 2	1,281
Timothy, No. 3	16
Dyke, No. 1	15
Dyke, No. 2	588
Mixed hay	72

This was shipped from the counties of Cumberland and Colchester, N.S., and Westmorland and Carleton, N.B. Ninety per cent was sold locally and ten per cent exported to Newfoundland and Bermuda. The crop was better than the average, but the farmers generally cut their hay too late, causing poor colour and the presence of mature weeds and dead grasses. Although hay grading was introduced only recently, it has already shown good results. The price paid for No. 1 over No. 2 was from $1.50 to $2 a ton, and for No. 2 over No. 3 from $1 to $2 a ton. The better hay was marketed early in the winter at a good price, while the rejected hay found no market except for a few cars which were shipped under the old system without grading.

EDUCATIONAL WORK

The inspectors judged at seed fairs, attended agricultural meetings in their respective provinces, and spoke on subjects pertaining to their work. Attractive educational exhibits were shown by the officers of the branch at the Amherst and Fredericton Seed Fairs. They consisted of samples of grain, standard feeds and fertilizers, and the different grades of hay. Many farmers visited the exhibits and asked questions on various phases of the work.

The inspectors are members of the provincial Seed Boards and attended the several meetings. Four papers were broadcast from the radio stations at Fredericton, N.B., and Wolfville, N.S.

One inspector was sent to Washington, D.C., for a three weeks' course in hay grading. Another spent two weeks in western Ontario making a special

study of root seed production and investigating the possibilities for marketing swede turnip seed grown in Nova Scotia. The district inspector addressed the New Brunswick Farmers' and Dairymen's Association on seed production and legislation.

Quebec District

This district comprises the province of Quebec, with the exception of Pontiac and Wright counties. There are five sub-districts, each with an inspector located at the most convenient point and responsible to the district inspector at Montreal. The sub-districts are Montreal, Eastern Townships, Quebec city with Lake St. John and Abitibi, Beauce and Eastern Quebec, Rimouski and Gaspé. One inspector is employed at the Montreal office to grade seed and assist the district inspector in supervising the work. During the spring season a temporary inspector is appointed for the Montreal district, where the work becomes too heavy for one man.

In the fall of 1923 a seed laboratory was established in Quebec city with a view to serving all the territory east of the Ottawa river. Since that date the Seed Branch has undertaken the control of the trade in feeding stuffs, fertilizers, binder twine, hay and straw, and insecticides and fungicides. These additions have necessitated the establishment of a separate laboratory for the Maritime Provinces, and justify the change of the headquarters from Quebec to Montreal, as centre of the work for the province of Quebec. Such a change will enable the Seed Branch to render more efficient service at a lower cost.

SEED PRODUCTION AND SUPPLY

In early spring fairly good conditions favoured seeding operations, but wet weather prevailed later in May and delayed seeding in many districts. The summer was favourable, but bad weather during harvest seriously damaged all crops. Wheat gave a poor yield and late sown oats were of poor quality. Surpluses of only a few carloads were available in Laprairie and Bonaventure districts.

The best clover sections suffered heavily from winter killing and poor weather for setting, ripening and harvesting of seed. The districts of Vaudreuil and Soulanges, where over 60,000 pounds of clover seed were produced in 1927, had no surplus for sale this year. Timothy seed did well in Joliette and a large quantity was sold as grade No. 1.

Barley production is increasing in Quebec. Growing centres have been organized in some districts with special attention to barley for malting purposes. The trials made in Maskinongé and Berthier gave satisfactory results, the quality of the barley being very good and prices paid to farmers quite acceptable.

SEED COMPETITIONS

The combined seed crop competitions, with some modifications, were continued. The number of competitors were as follows: wheat, 88; oats, 829; barley, 118; peas, 37; vetch, 25; red clover, 190.

There was an increase in the quantity of registered seed. The following kinds and quantities were sealed for market:—

Kind of Seed	Variety	Registered No. 1	Registered No. 2
		bushels	bushels
Wheat	Huron	142	33
Oats	Alaska	771	200
Oats	Banner	542	442
Barley	O. A. C.	469	.....
Barley	Manchurian	9	.....
Peas	Mackay	33	.....

INSPECTION

The inspectors covered 1,645 points and visited 4,584 merchants or dealers, divided as follows: 2,044 seed, 2,239 feed, 246 fertilizer, 37 binder twine, 18 hay and straw.

The exhibits at the Provincial Seed Fair, Rimouski, were graded at the laboratory on samples received for purity and germination tests. These analyses show that, in spite of an unfavourable season, all the grain exhibits were of good appearance and gave a high percentage of germination.

In the county of Bonaventure 9,000 bushels of Banner oats were inspected and sold as seed, of which 60 per cent graded No. 1, 25 per cent No. 2, and 15 per cent No. 3. In Laprairie district 4,282 bushels of Banner oats were graded and sold as No. 1 seed.

The official samples taken during the year are as follows: 877 seed, 370 feed, 163 fertilizer, 6 binder twine. Ten prosecutions were taken against seed dealers. All pleaded guilty and were sentenced to pay fine and cost of prosecution. Economic poisons were checked, 150 samples were taken, and explanations on the Agricultural Pests' Control Act were given to manufacturers and dealers. The labelling was corrected on the new stock and tolerance was allowed on old stocks the labelling of which did not meet all requirements of the Act.

During the spring of 1928 a seed drill survey was undertaken throughout the province. The inspectors took 813 samples, which were tested for purity and germination. Copy of the certificate of analysis was addressed to every farmer who had supplied a sample, with a covering letter giving information on the quality of the seed used. These reports were compiled and a circular letter, including comments on the seed situation in Quebec, was forwarded to over three thousand farmers, agricultural organizations, and other parties interested in improving Quebec agriculture.

The inspectors lectured at the winter short courses organized by the provincial Department of Agriculture. Demonstrations were given on the grading of seed and the commercial value of feeding stuffs and fertilizers at the Provincial Seed Fair, Rimouski; and the inspectors judged the different classes of cereal exhibits.

Eastern Ontario District

Ottawa is the headquarters for the district which comprises Old Ontario east of York county and the Canadian National Railway running from Toronto to North Bay, New Ontario to lake Nipigon, and Wright and Pontiac counties and the Ville Marie district in Quebec.

SEED PRODUCTION AND SUPPLY

There is a wide range of conditions in this district, and during many seasons the local supply of seed would be inadequate. Nearly all the cereal crops do well, and of the small seeds, red clover, alsike and timothy may be produced in abundance. However, in spite of these facts there are few seasons when some sections, and often very large areas, are not short of one or more kinds of seed. Last season was no exception, and seed stocks of oats and barley were needed in eastern and northern Ontario. Old meadows in eastern Ontario suffered severely and less timothy seed was harvested this year.

The pea crop was cut to half the normal yield by extremely wet weather in harvesting. Great waste occurred on the fields from shelling, and there was heavy dockage in picking the fancy peas for market.

A fair quantity of alsike and red clover seed was harvested in central Ontario, but the quality was poor in appearance and weed seed content. Several carloads of alsike were shipped to the United States.

Early sown grain gave best results. In central Ontario good crops of fair quality was the rule rather than the exception. In eastern Ontario there were large areas where the crops were very poor. Late seeding and poor harvesting weather were contributing causes.

There were 1,646 places visited, in some cases involving several calls, and inspections include 2,006 for seed, 636 for feed, 36 for fertilizers, and 5 for binder twine. The inspectors took 485 official samples, 279 seed, 146 feed, 55 fertilizer, and 5 binder twine. Many minor violations of the Acts were settled by satisfactory adjustments. Four cases of violation of the Seeds Act were taken to the courts and convictions were registered. One was against a seed merchant and the other three were against farmers.

The combined seed crop and cleaned seed competitions number 20, 13 in barley, 4 in oats, 2 in red clover, and 1 in wheat. There were 275 growers who had some 4,000 acres in registered seed crops, which would yield at least 125,000 bushels of seed grain.

Following are the quantities of seed finally inspected and graded for market:—

—	Registered No. 1	Registered No. 2	Registered No. 3	No. 1	No. 2
	bushels	bushels	bushels	bushels	bushels
Wheat	262	54	.....	1,134	.....
Oats	1,486	739	54	468	175
Barley	761	3,358	878	1,100	.....
Peas	72	.....	.....	.....	.....
Totals	2,581	4,151	932	2,702	175

EDUCATIONAL WORK

Most of the educational activities were carried on in co-operation with provincial organizations where the work was of a common nature. Several meetings were attended where the new Ontario weed law was discussed with the recently appointed weed inspectors for the province. Weed inspectors were shown either the actual weeds or cuts of them, and instruction was given on the best means for their eradication. Our inspectors were in demand at the fall fairs to judge the grain, field roots, and garden vegetables. Addresses on seeds, weeds, and cleaning machinery were given at short course meetings held by the agricultural representatives, and assistance was given in putting up samples for junior farmer competitions in seed judging. Persons installing seed cleaning machinery were advised in regard to arrangement and operation.

Two successful seed fairs were held under our direction, one at Almonte for the Ottawa Valley Seed Growers' Association, and one at Belleville for the Bay of Quinte Seed Growers' Association. Exhibits, while not so numerous as in the previous year, were generally better than expected considering the nature of the season. The placing of awards in the combined seed crop competitions was made the occasion for giving addresses on seed production and marketing.

WESTERN ONTARIO DISTRICT

This district includes Old Ontario west of and including the counties of York, Simcoe, Muskoka, and Parry Sound. The district office and seed laboratory are located in the Seed Branch building at 86 Collier street, Toronto. The personnel consists of a chief inspector, seven inspectors, and a clerical staff. Four inspectors are stationed at convenient points in sub-districts, and three are required at headquarters to grade samples received at the laboratory, to

inspect and grade hay and straw, to sample seeds being imported, and to inspect products required to be sold in accordance with the provisions of the various Acts.

SEED PRODUCTION AND SUPPLY

There was a decided increase in the acreage devoted to corn for husking, and the fall of 1928 was favourable for ripening of the crop. The yield was above normal and a considerable quantity was saved for seed. Conditions were not favourable for the setting and ripening of alfalfa seed, and the quantity was not in excess of local requirements. There is a large acreage devoted to alfalfa, and growers will reserve it for seed when conditions appear favourable. The increased acreage of red clover seed gave a fair yield, but the quantity was not sufficient to supply the demand. The alsike seed crop was very disappointing both in quantity and quality. Weather conditions in the spring of 1928 were excellent for bluegrass, and a good quantity of seed was produced. The acreage devoted to wheat was estimated at less than the previous year, and the yield was less also. There was a decided increase in the acreage devoted to barley, and a strong demand is evident for good seed this spring. Weather conditions at time of ripening were unfavourable for grain crops, and the yield was much less than estimated earlier in the season. However, some good seed oats were available and in Waterloo and Brant counties 8,000 bushels were sealed as grades Registered 1, 2, or 3.

INSPECTION

Visits were made to 1,134 points, and inspections included 1,636 seed, 1,020 feed, 331 fertilizer, 46 binder twine, 244 poisons, and 435 hay and straw. The total official samples taken by inspectors were 2,850 seed, 338 feed, 528 fertilizer, 86 binder twine, and 24 poisons. Field crops inspected totalled 2,047 acres, including 108 acres of wheat, 1,203 of oats, 255 of barley, 81 of corn, 289 of flax, and lesser areas of alfalfa, mangel seed and soy beans. There were 10,776 bushels of seed inspected for market as follows:—

——	Registered No. 1	Registered No. 2	Registered No. 3	No. 1
Barley	1,524	1,295	769	.....
Wheat	.....	486	.....	.....
Oats	2,636	1,512	1,390	.....
Flax	.....	.....	.....	1,164

Inspectors examined and graded 1,305 tons of hay and 144 tons of straw. There were 15,751 samples of seed graded, including 1,898 samples from the seed drill survey. Total imports of seed were 10,175,393 pounds. There were seven prosecutions under the Seeds Act, one under the Feeding Stuffs Act, one prosecution and three seizures under the Fertilizers Act. Revenue included $2,924 for seed analysis, $383 for hay and straw inspection, and $493 for seed inspection.

EDUCATIONAL WORK

Assistance was given with the Better Seed Train, which was run by the Ontario Department of Agriculture in co-operation with the Canadian Pacific and Canadian National Railways through parts of central and northern Ontario. A survey was made to learn the quality of seed being sown by Ontario farmers. Of the 1,898 samples, taken mostly from seed drills, 32 per cent were classed as rejected on account of excess weed seeds and 4 per cent on account of low germination. Seventy-five samples were being sown without cleaning and 633 had not been tested for suitability as seed. Many of the samples which

were reported as cleaned still contained a large percentage of immature, light and shrunken seeds, and many weed seeds which could easily be removed with suitable machinery properly operated.

Inspectors attended a number of meetings and gave addresses on crops, seeds, weeds, feeds, and fertilizers. They met the competitors in combined seed competitions to discuss the placing of samples, and acted as judges at fairs and exhibitions. The district inspector attended meetings of the Ontario Crop Improvement Committee, which functions also as a Provincial Seed Board.

Manitoba District

The district included until January 1, 1929, Manitoba, Saskatchewan, and Ontario west of lake Nipigon, with the district office and laboratory located at 812 Commercial building, Winnipeg, and sub-offices at 211 Grain Exchange, Fort Wiliam, and the Post Office building, Regina. Increased demand for the services of the Seed Branch necessitated a division of the district whereby a new inspection headquarters and laboratory were established at Saskatoon, and opened for the service of farmers and seedsmen in Saskatchewan the early part of January. The old headquarters continue to serve Manitoba, and Ontario west of lake Nipigon. This report, therefore, deals with the larger district for the first nine months of the fiscal year, and with Manitoba and northwestern Ontario the last three months.

SEED PRODUCTION AND SUPPLY

Spring opened up early but cold weather in April delayed work on the land. Wheat seeding was general in Manitoba by April 25, and in Saskatchewan by April 27. The principal crops were wheat, oats, barley, spring and fall rye, flax, sweet clover, brome, western rye grass, fodder corn, and sunflower. In the park belt of both provinces timothy, alfalfa, and a limited quantity of red clover were produced, while in Kenora and the Rainy River districts of northwestern Ontario red clover and alsike continued to be important crops. Alternate freezing and thawing of the ground and lack of rainfall in April caused a shortage of moisture, so that germination was uneven, particularly in the late crops, some of which did not show any growth until after the rain in June. Heavy rains brought the crops along rapidly and assured heavy yields of grain except in eastern Manitoba, where flooding again occurred. The grain developed rapidly with very little damage from rust, but there was considerable damage by hail and the Durum wheats lodged badly, due to excess moisture and heavy growth of straw.

Harvest commenced about the usual time, and good weather was experienced throughout the cutting and threshing period. Yields per acre were better than average. The grain suffered in appearance and grade on account of green kernels, resulting from the unevenness of growth and the frost damage of August 22. There was no shortage of seed, and the quantity of grain produced and marketed for this purpose turned out to be larger than ever. Private individuals, organized growers, and the seed trade all experienced a good demand for seed, both locally and from other provinces.

INSPECTION

Inspection of seed crops for registration necessitated visits to 344 points, 556 farmers, and 1,003 fields, totalling 24,604 acres. This represents an increase of 3,622 acres inspected, with a larger estimated yield as compared with the total in 1927. The following visits were made for certification of brome and western rye grass: 65 growers at 333 points with 103 fields, comprising 2,596

acres. Eighty-one fields were free of couch grass and eligible for certification. Seedsmen reported an excellent demand for brome grass seed certified free from couch or quack grass, and stocks were quickly sold out.

The following quantities of seed were inspected, graded and sealed during the crop year:—

—	Registered No. 1	Registered No. 2	Registered No. 3	No. 1	No. 2	No. 3
	bushels	bushels	bushels	bushels	bushels	bushels
Wheat	18,790	25,024	14,568	11,879	995	.....
Oats	3,151	13,092	5,989	20,460	18,080	3,879
Barley	1,201	1,800	914	873	.....	.....
Flax	1,081	.....	.....	.....	.....	.....
	pounds	pounds	pounds	pounds	pounds	pounds
Brome	.....	.....	.....	122,494	1,990	.....
Western rye grass	.....	.....	.....	22,600	2,300	.....
Sweet clover	.....	.....	.....	.....	10,700	.....

Inspectors visited 1,519 points, store and warehouse inspection totalling 3,628 for seed, 1,122 for feed, 25 for fertilizer, 55 for hay, 119 for binder twine; and 433 for insecticides and fungicides. These inspections resulted in taking 1,645 official or investigational seed samples, 364 feeding stuffs, 12 fertilizers, 187 binder twine, and 33 insecticides. The 9,555 samples received from farmers and dealers were tested and graded at headquarters. Customs samples totalled 1,825, representing 1,222,890 pounds of seed imported. These figures indicate increased activity in connection with inspection and grading of production under control.

Official visits to dealers indicate that sellers of seed are improving in ability and willingness to comply with the Seeds Act, and there appears to be a steady improvement in the quality of seed offered for sale. The number of violations was not large in proportion to the territory covered, and these violations were usually the result of imperfect understanding of the regulations or failure to bulk seed stocks properly. A few were due to carelessness or dishonesty and resulted in six prosecutions under the Seeds Act, all of which were successful. An inveti-gation was made of the vitality of paper packet seeds offered in the district. Kinds and varieties which tested below the standard of germination were sampled officially and retested, with results similar to those of original tests.

Inspection of feeding stuffs show that millers and manufacturers were complying with the Feeding Stuffs Act, and that mill by-products and commercial feeding stuffs were in good shape. The only difficulty was with chopped grain, which usually contains excess vital weed seeds.

Fertilizers seen principally on the premises of Winnipeg dealers were found to be marked correctly, and for the most part analyses were satisfactory. Extensive tests of superphosphate from Trail, B.C., were made this season by the Canadian Pacific Railway Company and provincial Departments of Agriculture. There is not much demand for fertilizers in the district.

A close check was made on binder twine as it arrived at large warehouses in Fort William and Winnipeg. Frequent measurements indicated that the different brands of twine averaged up to the stated length, and where an occasional shortage occurred it was within the 5 per cent tolerance allowed.

Inspection of insecticides and fungicides under the Agricultural Pests' Control Act received careful attention because many of the manufacturers and dealers were not familiar with the requirements. Winnipeg being the principal centre for the manufacture and distribution of insecticides, control work was started with visits to all manufacturers, manufactures' agents, wholesale drug-

gists, wholesale hardware houses, grocery houses, and paint and other manufacturers having by-products. Hardly any commodity to which the Agricultural Pests' Control Act applied was found to be in order, and firms were warned to secure registration and proper labelling.

Revenue of $9,360.20 was collected as follows: for testing and grading of samples, $1,949.29; hay inspection, $2; seed crop inspection, $4,207.80; seed inspection, $3,197.41; other, $3.70.

EDUCATIONAL AND DEVELOPMENT WORK

No. 1 alsike clover seed free from noxious weed seeds was selected at Oxdrift, Ont., and supplied to eight farmers in the Dauphin district with a view to establishing in Manitoba a seed centre for producing prime alsike. Small quantities of Grimm alfalfa, alsike clover, Altaswede red clover, Kentucky blue grass, creeping red fescue, Alaska and Victory oats were supplied farmers at Pontrilas in the Carrot River valley. Sufficient red top for one acre was placed with a good farmer at Swan River. Two lots of Boone timothy, the product of seed advanced previously, were returned and placed with other farmers in the district. Manhardy and Altaswede red clover placed at Whitemouth, Beauséjour and Piney produced a crop of seed for a number of growers, who returned the amount advanced or placed it with other selected growers. Six farmers in the Graysville district were each supplied with sufficient Manitoba-grown white clover seed for one acre.

A seed cleaning demonstration was made at Eriksdale. Barley, sweet clover, and alfalfa seed were cleaned with such satisfaction that the Eriksdale Agricultural Society established a seed cleaning centre with the aid of Dominion and Provincial grants. Other seed cleaning centres, established on a similar subvention basis, were started this year at Melita, Swan River, and Miami. Each plant is in charge of an agricultural society and consists of a standard mill and large Carter disk machine. To demonstrate central or itinerant power seed cleaning on a community basis this branch equipped the Manitoba agricultural extension service with a large unit consisting of the Forever, a machine of the Clipper type, and a Carter disk machine with extra sieves, extra disks, and necessary elevators. This unit was sent direct to the Miami Agricultural Society where it did good work and will probably be retained, or if moved on will be replaced by a similar outfit together with a Rota Grad or barley roll.

Advice was given to the Brome Growers' Association, Graysville, in connection with remodelling and operating their plant, and to the Seed Oat Growers' Association, Silverton, in establishing their new plant. Both of these centres did extensive custom cleaning after taking care of their own members.

The district inspector judged cereals, peas, beans, and flax at the Provincial Seed Fair, Saskatoon, and oats at the Provincial Seed Fair, Brandon. Inspectors judged at Brandon and at numerous seed fairs in Saskatchewan, and gave addresses at farmers' meetings, weed inspectors' conferences, and short courses. The district inspector gave radio talks at Winnipeg and Saskatoon and addressed provincial weed conferences, the Dominion Mortgage Loan Association conference, the U. F. M. annual, Manitoba agronomists, Manitoba seed growers, and local wheat pool meetings on subjects relating to Seed Branch work. He also served as secretary of the Manitoba Seed Board.

Assistance was given in organizing the Manitoba Seed Improvement Association and in providing speakers. Ricker mounts illustrating standards of quality for grades of seed were supplied for use of the extension service for lecture purposes. Several papers were prepared for publication, and addresses dealing chiefly with seed drill surveys and seed improvement were given in the district.

The seed survey was continued in representative parts of Manitoba. Townships centering on Dugald, Carman, Pilot Mound, Deloraine, Carberry, and Birtle were chosen. The samples were tested for purity and germination, and a report was sent to each farmer. The first 200 wheat samples were divided, to be grown at the Brandon and Indian Head Experimental Farms. The results of analysis, germination and growing tests were tabulated and included in the summary of recent surveys. They indicated great need for improvement in seed supplies of local origin, and formed the basis for recommending central power cleaning machinery, the production of fewer but suitable varieties, and frequent introduction of registered or improved seed.

Saskatchewan District

The district office and seed laboratory are at 610 Ross building, Saskatoon. Permanent inspectors are located at Regina, Saskatoon, and Moose Jaw, and when necessary temporary inspectors are employed at the latter two points.

SEED PRODUCTION AND SUPPLY

Frost injured the crops in some southern localities and in practically all of the northern districts, and made a short supply of good appearing seed. A survey of germination tests on wheat, oats, and barley showed little injury to the vitality of the wheat, but 27·5 per cent of the oats tested proved useless for seeding purposes, due to low germination, and barley showed 7 per cent with a germination below seed standards. The demand for good seed was keen, and early in January farmers were in the market. The condition of the seed will probably cause a decrease in the oat acreage sown, with a corresponding increase in barley.

It is estimated that in northern Saskatchewan about 50 per cent of the wheat seeded will be of early varieties such as Garnet and Reward. Even in the best Marquis districts the invasion of Garnet will be heavy. Registered stocks were in great demand, and the supply of first and second generation seed was exhausted by the first of April.

INSPECTION

Since January 1 the inspectors graded and sealed the following quantities of seed:—

—		Registered No. 1	Registered No. 2	Registered No. 3	No. 1	No. 2
Wheat	bush.	6,938	16,729	15,416	1,203	1,703
Oats	"	11,748	7,536	5,119	22,966	8,379
Barley	"	989	1,392	872	1,706	.....
Flax	"	646	870	.....	40	.....
Rye	"	.....	.....	550	.....	.....
Peas	"	4	.....	.....	.....	.....
Western rye grass	lb.	.....	.....	.....	23,954	.....
Sweet clover	"	12,031	3,336	1,385	.....	.....

Very little time was left for the inspectors to spend on control work. They visited 59 points, store and warehouse inspections totalling 147 seed, 20 feed, 1 fertilizer, and 3 agricultural poisons. These inspections resulted in 236 official and investigation samples being submitted for test. Revenue was collected as follows: $76.50 for testing and grading samples, and $162 for seed inspection.

EDUCATIONAL WORK

Assistance was given in the Saskatchewan Seed Campaign. Lists of graded seed were prepared as a guide to purchasers. Numerous meetings were addressed, inspectors judged at seed fairs, and advice was given on the cleaning and treatment of seed.

ALBERTA AND BRITISH COLUMBIA DISTRICT

The organization in this district includes an inspection office and seed laboratory at Calgary, and a sub-office at Vancouver. Five permanent inspectors, one of whom is a specialist working on field root and vegetable seed production in British Columbia, are employed under the district inspector. One inspector is required to assist in the office and take charge of grading. The other inspectors work throughout the district and are assisted by temporary inspectors during the busy seasons. The chemical analysis of feeds and fertilizers is done at Ottawa. The district work includes the grading and reporting of samples of seed received for analysis; examination and grading of bulk and sacked seed grain; seed crop inspection; seed, feed, fertilizer, hay, straw, binder twine, insecticide and fungicide inspection; and investigation of seed supply. The capacity of the organization was taxed to the limit this season to take care of the seed samples received for testing and grading, the total being 17,127. The total revenue collected was $4,693.92.

The cereal crop was seeded under favourable conditions, although the season was late. There was a large acreage of Garnet wheat, and more would have been sown had seed been available. The harvest fully justified this faith in Garnet as in practically every case this variety escaped the early frosts, yields were better, and grades better. The demand for Reward wheat was also very keen. The early frosts caused an investigation into the quality and quantity of cereal seed supplies. Eight hundred samples were collected from various parts of Alberta, and inspectors made an exhaustive study of shortage and surplus. The survey indicated sufficient seed to meet requirements within the province, but owing to high prices and scarcity of cash a large quantity of inferior seed was sown in 1929.

There was a heavy growth of grass last season and much good quality hay was stacked. The Pincher Creek district marketed 5,000 tons of timothy hay. Timothy seed production was about two million pounds for the district and higher prices were obtained by the growers. After two rather discourgaing marketing years prospects are brighter for this seed crop. Last year proved unfavourable to alfalfa setting seed, and only 15,316 pounds were presented for registration in the Brooks area.

The Peace River district again secured prominence through the winning exhibits of Herman Trelle at the Chicago International Hay and Grain Show. His wheat won reserve championship, oats second place, hard red spring wheat first, and small yellow field peas won championship. Great development is taking place in this district, and its agricultural importance is being generally recognized.

The production of red and alsike clover seed in northern British Columbia is promising in the Prince George district, some exceptional yields being reported. In the Bulkley valley drought limited the growth and it was impossible to harvest the greater part of the crop.

There is keen competition in the fertilizer trade, and in order to secure business some prices have been cut below the line of profit. For this reason, also, manufacturers are anxious to secure the highest possible analyses on their products and some probably guarantee the maximum rather than the average analysis, which results in frequent variation from guarantees. Fertilizer inspections numbered 325, and 124 official samples were taken.

Inspections under the Agricultural Pests' Control Act numbered 338, and all products were closely checked. This new work has been mainly educational and only two official samples were taken.

Hay and straw inspections numbered twelve and binder twine seventy-five, with thirty-eight official samples of the latter. Large quantities of flour were ordered by the War Office from manufacturers in this district, and each shipment had to be inspected and sampled, reports on moisture tests being made to Ottawa.

EDUCATIONAL

Four field crop and cleaned seed competitions were held in Alberta, and the results indicated that farmers were having great difficulty in cleaning their seed.

It was suggested to the provincial Government that part of the Dominion subvention grant should be used to assist in establishing seed cleaning centres and installing suitable seed cleaning machinery. The agreement provides that the growers in a district will meet half the expenses and the provincial and Dominion Governments the other half. Arrangements have been made to establish two of these centres, and others will be organized to improve the quality of the seed grain produced for market.

Press articles were prepared, radio talks given, and meetings of farmers, weed inspectors, and various associations interested in agriculture were addressed by the district inspector. Judging was done at various seed fairs, and branch exhibits were made at the Alberta Seed Fair and Calgary Exhibition. Inspectors gave courses of lectures dealing with various phases of Seed Branch work to agricultural students at provincial Schools of Agriculture, and addressed several farmers' meetings. Assistance was given to the provincial Government in conducting the Better Seed Campaign. A pamphlet was prepared and distributed dealing with the investigation, over a period of three years, of the quality of seed actually being sown by farmers. The results showed conclusively the need for exercising greater care in the selection and cleaning of seed.

The senior inspector in British Columbia attended a hay grading course given by the United States Department of Agriculture at Seattle, and received much helpful information.

Grain crops throughout the southern part of British Columbia were harvested under excellent conditions, and yields were good. Large quantities of hay were put up in this area, and yields of corn and other ensilage crops produced abundant feed for the winter. The quality of roots and vegetables were exceptionally good in most districts, although a few reported disease and frost injury. Root seed yields were very good, but the progress in root and vegetable seed production is slow and the quantity of seed produced for the market is small. One permanent inspector devoted a large part of his time to this work.

About one million pounds of seed are imported into this district annually. Large quantities of sugar beet seed are imported by the Canadian Sugar Factories, Limited, Raymond, and peas and beans by the Broder Canning Company, New Westminster and Edmonton.

INSPECTION

Inspection of seed crops was made on 342 fields of cereals and 93 fields of alfalfa, the acreage being 10,079 and 2,474 respectively. Seed inspection was made on the following quantities:—

—	Registered No. 1	Registered No. 2	Registered No. 3	No. 1	No. 2	No. 3
Wheat.....bush.	5,440	10,441	4,037	584	1,294	233
Oats..... "	12,882	10,121	5,271	10,625	6,992	3,800
Barley..... "	.....	1,430	21	.....	.....	.....
Peas, p.....pounds	400	.....	.....	.....	.....	.....
Alfalfa..... "	4,388	9,673	1,255	.....	.....	.....

Inspectors visited 1,448 points; 2,915 inspections were made under the Seeds Act and 326 official samples were taken. Advice was given to vendors in regard to labelling seed correctly and to farmers advertising seed for sale without showing the grade and certificate number. This season has shown a marked improvement in seed advertisements. Inspectors generally report fewer wilful violations of the Act and greater effort to comply with its requirements. This is attributed to the educational campaign conducted by the Branch through press articles, radio talks and addresses to farmers' meetings and agricultural students to make the public familiar with the Act and the work of the Seed Branch.

Under the Feeding Stuffs Act 1,382 inspections were made and 589 official samples were taken. Each season shows improvement in the manner in which feeds are being registered, labelled and placed on the market. It seems difficult for manufacturers to keep their products from varying slightly, and only occasionally will the analysis on an official sample be exactly that of the guaranteed analysis. They appear to be at a loss to explain deficiencies which exceed the limit of tolerance, and claim that the variation must be in the ingredients rather than in the mixing. There is a tendency, however, to show the higher percentages in the guaranteed analyses, without allowing sufficient margin for unavoidable variation.

INVESTIGATION

The investigation was continued to ascertain the quality of seed used by farmers in British Columbia, samples being collected direct from seed drills.

The senior inspector in Alberta has conducted research work regarding morphological variations among different strains of Marquis wheat grown under varying environmental conditions, with a view to assisting inspectors of seed crops in the identification of varieties. Investigations also conducted on the seed value of frosted and immature seeds in comparison with normal seeds, and on the comparative value of hulled and hulless sweet clover seed.

In the trial plots connected with the branch office at Calgary the following investigations were carried on:—

(1) Forty samples of wheat were tested to compare laboratory and field germination results, and from these samples frosted kernels were selected and seeded alongside to compare the germination with the original sample in the laboratory and in the field.

(2) From twenty selected Marquis heads ten kernels were seeded to determine the difference, if any, in morphological characters between parent and progeny.

(3) A few samples of wheat, which had remained unthreshed in the field over winter, were planted to determine their germination under field conditions.

(4) Forty samples of vegetable seeds were planted for varietal tests.

(5) Samples of registered oats, reported to contain yellow oats, were grown to determine purity of variety.

THE ENTOMOLOGICAL BRANCH

The work of the officers of this Branch, which is largely of a research nature, was continued during the year, with interesting and valuable results. Every year, as entomological research is developed, new discoveries regarding insect control are being made by our entomologists resulting in very important savings to farmers, fruit-growers, foresters, gardeners and others. The following is an account of the work of the Branch during the year ended March 31, 1929.

Division of Field Crop and Garden Insects

The field and garden crops of Canada, as a whole, during 1928, were again comparatively free from severe losses due to insect depredation. The general freedom of our officers from the necessity of conducting control campaigns has allowed them to give the major part of their attention to the prosecution of their investigations both of life-histories and of improvements for the control of those insects for which, as yet, no economic method of suppression is known. As a consequence, the general progress for the year of the strictly investigational work of the Division has been marked.

As items of special interest, mention may be made of demonstrations showing (1) the value of trap crops in the control of the wheat stem sawfly; (2) the promise of the possibility of safeguarding fields from egg laying by May beetles by the use of sulphur; (3) the control of the first generation of the carrot rust fly by corrosive sublimate applications, and (4) the fact that the European corn borer can survive the winter as far noth as New Liskeard, Ont., in corn stalks below ground or below the snow line.

In 1928, increased use has been made of the radio as a means of distributing entomological information. Co-operation between officers of the Division and those of provincial departments of agriculture and the Dominion Experimental Farms Branch has further developed during the year.

Notwithstanding the general absence of important insect outbreaks throughout the Dominion, the correspondence of the Division is increasing to a noticeable extent, not only at headquarters, but also at all of the laboratories.

Though the year was free from spectacular crop losses from insect enemies, certain species, however, were of sufficient importance to deserve mention, namely, (1) the slight spread of the European corn borer in Quebec, its occurrence in New Brunswick, the decrease of the infestation in Ontario, and the increase of corn acreage in the area formerly severely infested; (2) the failure of the Mexican bean beetle to increase in Ontario; (3) the destructive outbreaks of the bertha armyworm in the Prairie Provinces and British Columbia; (4) the red-backed cutworm in Alberta; (5) the bronze cutworm in New Brunswick, and (6) the continuing serious losses from wireworms in the Prairie Provinces.

The scouting for the European corn borer by officers of the Division of Foreign Pests Suppression indicated that though there was but a slight increase of area infested in Quebec province, the insect was found present in the St. John valley of New Brunswick. The numbers present in the corn crop were very small and with careful attention to control in each infested area, it may be possible to stamp out the infestation. In Ontario, this insect, in general, decreased in numbers throughout the corn area west of Toronto but continued to increase in the counties along the Lake Ontario shore, the improved conditions being most clearly illustrated by the fact that the corn acreage in the two most severely infested counties increased by 13,000 acres, or in other words, 22 per cent during 1928. The improved conditions, without doubt, are in great measure due to the enforcement of control recommendations by the Ontario Department of Agriculture, to which the farmers themselves gave most wholehearted and active support. Our confidence in the value of the recommendations is thus again justified and their application throughout the entire infested area should not be delayed.

The Mexican bean beetle, found in Ontario in 1927, has apparently established itself at only one or two points. Most of the infestations died out during the winter and at no point did the abundance of the insect suggest that it would be able to establish a vigorous infestation. It is hoped further observation will prove that Canadian conditions are unsuitable to the insect and that it will thus be prevented from becoming a pest of importance to the bean crop.

The bertha armyworm outbreak of 1927 was followed during 1928 by one even more intense and widespread. It occurred again in Saskatchewan and Alberta and in addition was present as a serious pest in Manitoba and over a large part of British Columbia. The important losses were to sweet clover, alfalfa, flax, and vegetable gardens in the prairies and garden crops in British Columbia. In Alberta, the infestation in the alfalfa and sweet clover seed growing areas necessitated an aggressive control campaign, as a result of which the crops were largely saved. A pamphlet, recently issued by the department, will enable the farmer to recognize the insect in its early stages and to take such measures of control, as are necessary, to protect field and garden crops from serious losses.

A destructive and unexpected outbreak of the red-backed cutworm occurred in the sugar beet area of southern Alberta. Prompt measures were taken to organize a control campaign, and as a result of special irrigation and poisoning measures, the crop itself was saved or the insects were reduced to a point where reseeding was possible in time for a new crop. Virtually, the crop in the entire acreage threatened was saved.

The bronze cutworm was present in great abundance upon the Tantramar marsh in New Brunswick and destroyed the hay crop upon 2,000 acres, a matter of great seriousness to the owners. The outbreak was not discovered in time for active control measures to be undertaken. A great deal of information bearing upon the control of the cutworm was, however, secured during the season; the evidence obtained points to another destructive outbreak in 1929. With the information now on hand, our officers will be better equipped to give valuable advice at the time of any future outbreaks.

Wireworms continue to be most serious insect pests in the Prairie Provinces. The loss for the year in Saskatchewan is estimated at about 1·5 per cent of the wheat crop (4,550,985 bushels of wheat). In view of the increasing losses, the development of control investigations is being pressed forward as rapidly as possible.

The wheat stem sawfly throughout the Prairie Provinces was at the lowest point for some years. A favourable year for its development, however, may change the whole situation in a single season from one of comparatively little loss to one with most serious inroad on the yield. Consequently, the control investigations are being continued with particular reference to the areas of heavy soil which do not lend themselves to the present control recommendation. These studies during 1928 have demonstrated the remarkable value of trap crops in the control of this insect, and their wide use owing to their practicability promises to eliminate the necessity for severe loss from this insect even in years favourable to it.

Grasshoppers, though fortunately of little material consequence over any extended area in Canada during the year, continue to be studied by our officers. There is some evidence that they are increasing locally upon the prairies and in certain sections of British Columbia.

During the year, attention has been given to a large number of somewhat less important insects. The co-operative potato beetle control project with the Department of Agriculture of British Columbia has been continued and through aggressive local control efforts has effectively prevented the potato beetle from extending its range in the province. Other insects which were carefully studied at the laboratories throughout the Dominion were: cutworms of several kinds, onion maggot, cabbage maggot in turnips, carrot rust fly, tarnished plant bug, armyworm, potato stem-borer, seed corn maggott, cyclamen mite, native insects of leguminous and cruciferous plants, sweet clover leaf-miner, and plant bugs attacking alfalfa. Among broader studies, the relation of prairie crop rotation to insect abundance, the importance of insects in alfalfa seed production, range

rotation as a factor in grasshopper abundance, and the correlation of seasonal insect and plant development, have all been continued with satisfactory progress, and in certain cases with most valuable results.

Division of Forest Insects

The investigation of airplane dusting for the control of spruce budworm outbreaks was continued during the summer of 1928 on an infested pulpwood forest near Westree, Ont. The work was conducted again this year through co-operation between the Entomological Branch of this department and the Royal Canadian Air Service. In the course of the experiments a series of plots each 1,000 feet long were treated by airplane with different strengths of calcium arsenate. In spite of unfavourable weather conditions and an accident to the plane, valuable information was obtained. The object of these airplane dusting experiments is to determine the feasibility of employing this method with the best equipment available at the present time for the control of extensive outbreaks of defoliating insects, such as the spruce budworm, which have caused such appalling losses to our eastern pulpwood forests. Aside from the methods of forest management with a view to obtaining a substantial degree of immunity in the forest to outbreaks of this type, which have been proposed by our officers as a result of their investigations during the last few years, airplane dusting appears to offer the only hope of effective control for these great infestations. The results that have been obtained in the preliminary experiments carried out in co-operation with the Air Service during the seasons of 1927-28 lead us to hope that we can eventually use this method with great profit, and plans are being devised for a more extensive experiment in the summer of 1929 that will enable definite conclusions to be drawn with respect both to the effectiveness and cost of this method of control.

Our biological investigations of the spruce budworm were conducted at Westree, Ont., the spruce budworm outbreak in Cape Breton Island in Nova Scotia, where these studies were carried out previously, having almost disappeared. The spruce budworm outbreak in this region is an extension of the injury investigated by our officers in the Welcome Lake district during the past two years and appears to be spreading rapidly to the westward. A large amount of balsam fir has already been killed.

Control operations for bark-beetles affecting yellow pine in southern British Columbia having been brought to a successful conclusion, no control work was considered necessary in 1928, and there was no indication of any serious increase of this injury. Our control work for beetles affecting lodgepole pine was continued with success in one locality in co-operation with the provincial Forest Service. The co-operative plan for control of outbreaks of this type, conducted between the Dominion Entomological Branch and the Dominion and provincial services, reported upon last year, was continued in 1928, and we believe will prove to be a very valuable feature in forest protection. Our officers have again visited many of the stations of the Forest Services and instructed the forest officers in the determination of forest insect injuries in their district with a view to obtaining early and accurate information on insect outbreaks and applying control measures before extensive injury has been caused.

Our investigation of the western cedar borer in British Columbia has been practically completed and was continued as a minor investigation in 1928.

The larch sawfly, which is the most destructive enemy to the larch or tamarack forests throughout the entire area of the eastern larch in this country, was under investigation in 1928. Our officers continued their attempt to distribute the European parasites of the larch sawfly, which were introduced into this country by our officers some years ago, to selected areas infested by the sawfly.

A special officer was appointed to develop this particular phase of the work and satisfactory progress is being made.

Through the Parasite Laboratory of the Imperial Bureau of Entomology in London, our officers have obtained a supply of European parasites of the European pine shoot moth. These were introduced into areas infested by this imported pest. Arrangements have been made with the Imperial Bureau of Entomology to obtain other species of European parasites that may prove useful in the control of some of our serious forest insect enemies.

The investigation of injuries to fire killed trees and logs caused by wood borers was continued on a more extensive scale in 1928. The new method of control by distributing lime sulphur dust over the piles of logs left in the woods exposed to beetle attack throughout the summer was tested on an extensive scale with satisfactory results. This method has proven cheaper than any other that has been employed in the past and has been very effective under the conditions met with in our experiments. It has been recommended for more extensive testing to the lumber operators.

The European beech bark louse was under investigation again in 1928. A survey carried out in southern New Brunswick by our officers has determined that the distribution of the insect from Nova Scotia to southern New Brunswick, which was reported last year, has extended over a considerable area in Westmoreland and Albert counties, and it was considered to be impossible to exterminate the injury in the New Brunswick infestation and not practical to carry out any extensive control operations. An attempt will be made to import from Europe parasitic and predatory insects to assist in checking the injury caused by this pest.

During the past two years a defoliating caterpillar, known as the hemlock looper, has very seriously defoliated extensive areas of hemlock in the region of the Muskoka Lakes and the Brockville district of Ontario. In 1928, our officers conducted a careful investigation of the situation and arrangements had been made to conduct an airplane dusting campaign for the control of the outbreak in the Muskoka lake region. The Ontario provincial Government provided a special air machine for this work and the requisite amount of calcium arsenate dust. The operation was to be conducted in co-operation with our officers, but an unfortunate delay in the delivery of the plane prevented this work from being carried out in 1928. The investigation of the hemlock looper outbreak carried out by our officers discloses that the infestation is likely to be severe and widespread in 1929. Many trees have already been killed. Two distinct outbreaks of the hemlock looper have been reported by our officers on the British Columbia coast, north of Vancouver.

Early in the summer of 1928, reports were received by our officers of extensive insect injury to balsam fir pulpwood stands on the north shore of the St. Lawrence below the Saguenay river. A survey carried out during the late summer by one of our officers determined that some 400 square miles of balsam pulpwood forest have been more or less severely defoliated by the hemlock looper and that a considerable quantity of balsam fir was apparently already killed through the ravages of this insect. There is every indication that this outbreak will spread over a much larger area during the next few years. This is the first definite record of an extensive injury by this insect to balsam fir in Eastern Canada. The same species has caused serious loss to hemlock stands in the Muskoka region of Ontario during the last two years. It has been destructive to both hemlock and balsam fir in the state of Michigan in recent years and has long been an important enemy of balsam fir in Newfoundland. Preparations are being made by our officers to carry out a thorough investigation of the situation in 1929.

Shade tree investigations in the Prairie Provinces have been continued from the Laboratory at Indian Head, Sask. The more important insect injuries to the shade trees and forest trees of the prairie regions are investigated by an officer stationed permanently at this laboratory and every effort is made through advice and education to assist in the protection of the trees of this region.

Insects affecting shade trees in Eastern Canada were investigated at the laboratories at Ottawa, Ont., and Fredericton, N.B. Insects affecting sugar maple groves again received special attention. An exhaustive biologic and ecologic study of this problem is being conducted from the Ottawa laboratory. Various insects affecting shade trees of cities and towns in Eastern Canada have been under investigation.

The survey of the distribution of the pine shoot moth, introduced into many parts of Canada on pines some years ago, has been continued and the efforts of our officers to exterminate this pest have met with a most satisfactory degree of success. Every effort is being made to reduce the present infestations and to prevent the further introduction and distribution of this important pest of pines.

The satin moth, a European pest of poplars and willows imported into British Columbia some years ago, has spread over a considerable area in the coastal region of that province. On the lower mainland the satin moth is now common from Vancouver, on the coast, as far east as Agassiz and Rosedale in the Fraser valley. On Vancouver island it now extends northward up to the east coast of the island from Victoria as far as Comox and it also occurs at points on the coast of the mainland extending northward, at least as far as Powell river. This insect has spread during the last few years from planted trees on which it was at first observed to native stands of cottonwood and aspen and it may in the future become a serious enemy of these trees. Through a regulation of the Destructive Insect and Pest Act prohibiting the movement of poplars and willows from the coast to points in the interior, an effort is being made to check the eastward distribution of the pest.

Investigations on the biologies of important forest insects have been continued at the laboratories at Fredericton, N.B.; Ottawa, Ont.; Indian Head, Sask.; and Vernon, B.C.; and in the forest insect stations at Westree, Ont., and Pender Harbour, B.C. Our knowledge of the habits of these insects and their relations to the health of the trees which they attack has been greatly extended by the discoveries made in the course of this work.

Studies in the taxonomy and morphology of forest insect groups were conducted again as usual by certain of our officers during the winter months.

Division of Foreign Pests Suppression

The activities of the Division have materially increased during the year; additional co-operative work has been instituted with other divisions, and there has also been a marked increase in the general work. This Division is concerned with the administration of the regulations under the Destructive Insect and Pest Act, including the issuing of permits to cover the importation of plants, the inspection of imported plants and plant products, the maintenance of foreign and domestic quarantines, the application of methods of control of foreign pests imported into Canada, and the scouting of territory for possible new infestations.

Plant Inspection Service.—During the year four new plant inspection stations were established, namely at Halifax, N.S.; Windsor, Ont.; Winnipeg, Man.; and Estevan, Sask.; making a total of eleven stations extending from Halifax to Vancouver. On September 1, 1928, the regulations dealing with the importation of plants were revised and all countries were placed on the same

basis. Previous to this revision, importations from the United States were permitted entry when accompanied by a certificate of inspection and were not subject to reinspection on entry into Canada.

For the year ended March 31, 1928, 16,441 permits were issued to cover importations of plants from all countries, an increase of 2,712 over the preceding year. For the same period 43,100,821 plants were imported and were inspected either at the port of importation or at destination. This is a very marked increase over the preceding year, amounting to 8,475,941 plants. The value of the plants imported, according to the report of the Department of Trade and Commerce, was $1,289,300. The number of inspections of plants was 6,519, an increase of 559.

Importations by mail amounted to 2,747 packages involving 2,054 inspections, an increase of 177.

A total of 3,622 passenger boats was met at the ports of Saint John, Quebec, Montreal, and Vancouver, and the passengers' baggage examined for plants in co-operation with customs officers; 259 passengers on 235 boats had plants in their possession. Prohibited or diseased plants were intercepted in forty cases.

Inspection of plant products could only be undertaken as time permitted. However, 6,554 inspections were made at all ports covering 1,977,650 containers, an increase of 684 inspections and 507,450 containers. In 71 cases interceptions of insect pests or diseased products were made.

The total number of inspections made by officers of the division including all projects was 13,824, an increase of 1,265 for the year.

During the year 941 interceptions were made in the inspection of plants and plant products. This represents an increase of 75 per cent over the previous year. The pests intercepted included European pine shoot moth, European earwig, root borers, scale insects of various kinds, mites, eelworms, bulb flies, and various diseases of bulbs.

The Division of Botany of the Experimental Farms Branch again co-operated by identifying plant diseases intercepted by the inspection service.

During the year ended March 31, 1928, plants were refused entry in 60 cases, owing to their importation being contrary to regulation. Twenty-seven shipments of potatoes were also refused entry for the same reason.

In seven cases special authorization was granted for the importation of plants for scientific purposes, which were otherwise prohibited entry.

There has been a marked increase in the number of plants inspected and certified for export. Six hundred shipments were certified for export to thirty countries. The shipments consisted of 114,974 bulbs, 27,183 ornamentals, 3,731 fruit trees, 58,635 seedlings, 50,815 fruit seedlings, 9,963 pounds of tree seeds, 500 pounds of onion sets, and 2,000 square yards of sod for greens. Canadian plants are now exported all over the world. The United States was the largest customer with 373 shipments and Great Britain next with 97.

Brown-tail Moth.—Scouting for this insect was carried on in the following districts in Nova Scotia during the winter of 1928-29: Wolfville, Canning, Canard, Aylesford, Middleton, Kingston, Nictaux, Torbrook, Spa Springs, Bridgetown, Annapolis, Tuperville, Round Hill and Mochelle. As no sign of this insect was found either this year or last year, it is hoped that the pest has now been eradicated from the province.

Apple Sucker.—Scouting operations carried on in June, 1928, in the province of New Brunswick indicated that there was practically no spread of the insect during the year. All of Nova Scotia, Prince Edward Island, and two counties in New Brunswick are under quarantine. The movement of the host plants of this insect is prohibited and all other nursery stock must be accompanied by a certificate of inspection. During 1928, 79 certificates were issued for 14,708 plants valued at $3,000.

European Beech Bark Louse.—This is a European insect and was discovered in Nova Scotia some years ago, where it is causing severe injury to the native beech. It has since spread into the counties of Westmoreland and Albert in New Brunswick. In co-operation with the Division of Forest Insects, officers of this division carried on extensive scouting to determine the exact distribution and intensity of infestation of the insect. All accessible stands of beech in Westmoreland, Albert, Kings and St. Johns counties, the St. John, Nashwaak and Miramichi river valleys, and sections of York and Carleton counties in New Brunswick, were examined. No outbreaks were found outside of Albert and Westmoreland counties and the total area of all infestations discovered is approximately 4,370 acres.

Gypsy Moth.—Although no sign of the gypsy moth has been found in southern Quebec since 1926, it was considered advisable to re-examine thoroughly the site of the general outbreak at Henrysburg, and also to examine new territory for possible incipient outbreaks. As no egg clusters or larvae of this most serious pest were found at Henrysburg during 1928, no spraying of the area was undertaken, but all trees, buildings, stone walls in the immediate vicinity of the original outbreak were carefully inspected.

In view of possible wind spread from the original infestation, an area of approximately eleven square miles surrounding the Henrysburg infestation was thoroughly scouted, i.e., every tree in this area was examined. No sign of the insect was found. It is to be hoped that the pest has now been eradicated from Canadian territory, but it will be necessary to continue scouting for some years.

Regulation No. 7 (Domestic), which prohibited the movement of Christmas trees from certain areas, and restricted their movement from certain other districts without inspection, was rescinded on April 12, 1928. The quarantine placed on the same areas by the United States Department of Agriculture was likewise withdrawn on July 1, 1928.

European Corn Borer.—Since the discovery of this insect in couthern Ontario in 1920, the pest has gradually spread each year. The entire farming portion of Ontario is infested east of Sault Ste. Marie, and the western portion of the province of Quebec as far east as Champlain county. In 1928, however, very little eastward spread occurred.

It is regrettable to report that an infestation of the two brooded strain, similar to that occurring in the New England States, was discovered by inspectors of this Division in the counties of Sunbury and Queens in New Brunswick.

Apart from southwestern Ontario, there has been no serious damage to corn owing to the lightness of the infestations. Records are taken each year at certain specified points throughout the infested area, to determine the increase or decrease in the number of borers present. In 1928, there was a slight increase in the more lightly infested districts, whereas in those counties in Ontario where compulsory control operations are carried out under the direction of the Ontario Department of Agriculture, there has been a marked decrease.

In order to assist in preventing the spread of the borer, a quarantine is maintained which prevents the movement of all portions of the corn plant from infested to non-infested territory. Provision is made for the movement of clean shelled corn for seed or feed purposes provided shipments are inspected and certified.

Mexican Bean Beetle.—This insect, which has gradually worked its way north from the southern states, was found in southwestern Ontario in the summer of 1927. Outbreaks of the pest were found at a number of different points in several counties. Apparently the winter of 1927-28, owing to its severity, was extremely unfavourable for the establishment of the pest, for only one locality infested in 1927 was found again infested in 1928. The new infestations were found, however, in Norfolk county.

European Pine Shoot Moth.—Since the discovery of this insect in Canada in 1925, control measures have been carried on each season in an endeavour to bring about its eradication. All pines imported since the inauguration of the permit system have been re-inspected and kept under observation, with the result that the general situation is most encouraging. With the exception of a few localities in which progress has been noted, the pest appears to have been brought under control. Systematic examination of infested trees will, however, have to be continued.

Oriental Peach Moth.—In view of the fact that this insect now invades practically the entire peach growing sections of Ontario, no scouting was undertaken. In co-operation with officers of the Vineland entomological laboratory, studies were continued to determine the increase in the intensity of infestation.

Dutch Elm Disease.—This very serious disease was discovered in Holland in 1919, and has now spread to many other countries. In order to prevent its introduction into Canada the importation of elms from Europe is prohibited. In co-operation with the Division of Botany, Experimental Farms Branch, officers of this Division have examined elms imported previous to the restrictive order, and elms recently imported were placed under quarantine for two years. Up to the present time, no sign of the disease has been found.

New Pests.—Two new pests were discovered for the first time in Canada during the year. The inspector in charge of the Niagara Falls district found a new insect affecting pine buds, which was later identified as *Exoteleia dodecella* L. Its habits and methods of attack are similar to those of the European pine shoot moth. The officer in charge of the Victoria, B.C., laboratory, discovered an insect attacking yews, which was identified as the small apricot or vine moth, *Batodes angustiorana* Haw. An attempt will be made during 1929 to determine the distribution and amount of injury caused by both these insects. They are both of European origin.

Division of Systematic Entomology

The work of this Division has been continued along the lines indicated in previous reports.

Considerable additions to the Canadian National Collection of Insects may be reported, the main sources being as follows:—

(1) The insect faunal surveys conducted by members of the divisional staff.
(2) The activities of field officers stationed in various provinces of the Dominion.
(3) Donations from outside sources, such as museums, private collectors, etc., this material being generally obtained in working over specimens sent in for determination.

Taxonomic studies in various groups, notably coleoptera, diptera, hemiptera, lepidoptera and ephemeroptera have been continued and the results published in various scientific journals; fifteen such articles have appeared during the year, in which over one hundred species new to science have been described.

Insect faunal surveys were conducted by divisional officers in the Knowlton region of Quebec, the Miramichi valley, New Brunswick, the Annapolis valley, Nova Scotia, and the Rocky mountain region of Alberta and adjacent portions of Montana.

The amount of identification work done for field officers, museums and private individuals have increased considerably and has taken up a good proportion of the time of the divisional technical officers. This work has unfortunately been badly hampered through the resignation of the specialist in charge

of diptera; as a result at the present time, no accurate determinations in the very important groups of dipterous and hymenopterous parasites can be undertaken.

Additions to the branch library, apart from the current periodicals, have been comparatively few.

Destructive Insect and Pest Act Advisory Board

The Destructive Insect and Pest Act Advisory Board was constituted in 1922, for the purpose of recommending to the minister such changes in the regulations under the Destructive Insect and Pest Act as may be deemed necessary or in the public interest. The personnel of the Board is composed of five officials of the Department of Agriculture. Meetings of the board are held when necessity arises. The following regulations were approved by Order in Council:—

Regulation No. 1 (Foreign) 2nd Revision. P.C. 559.

Governing the admission of nursery stock into Canada.

This regulation was amended by placing all countries on the same basis, and requiring that all importation of plants be accompanied by a certificate of inspection issued at time of packing. In addition the following were added as inspection ports: Halifax, N.S., Toronto (for mail parcels), Windsor, Ont., Winnipeg, Man., and Estevan, Sask.

Regulation No. 2 (Foreign) 1st Revision. P.C. 559.

Governing the admission of nursery stock into Canada from the United States.

This regulation was rescinded, importations of nursery stock from the United States now being governed by Regulation No. 1 (Foreign).

Regulation No. 3 (Foreign) 4th Revision. P.C. 559

Prohibiting the importation of potatoes from certain countries or districts thereof.

As effective means have been discovered for treating potatoes infested with the potato tuber moth, and rendering them free from infestation by this insect in all its stages, this regulation was amended to permit the importation of potatoes from California when accompanied by a certificate indicating that they were fumigated under vacuum with carbon bisulphide and carbon monoxide for seventy-five minutes.

Regulation No. 10 (Foreign) 5th Revision. P.C. 559

Restricting the importation of corn and certain other plants from certain states of the United States on account of the European corn borer.

The only change in this amendment was a rewording of the regulation in order to clarify its meaning.

Regulation No. 11 (Foreign) 3rd Revision. P.C. 559

Prohibiting the importation of alfalfa hay from certain states of the United States on account of the alfalfa weevil.

This regulation was amended to permit the importation of alfalfa hay and alfalfa meal from uninfested sections of the infested states provided shipments were accompanied by certificates indicating that the hay or meal was grown or originated in districts not infested by the alfalfa weevil.

Regulation No. 14 (Foreign) 4th Revision. P.C. 559

Prohibiting the importation of peaches and peach nursery stock into British Columbia on acount of the Oriental peach moth.

Owing to the Oriental peach moth having invaded the peach-growing sections of eastern Canada, the restriction on the importation of fresh peaches and peach nursery stock from the infested sections of the United States was removed; the embargo on British Columbia is still maintained as the pest has not yet invaded that province.

Regulation No. 16 (Foreign) New. P.C. 559

Restricting the importation of coniferous and deciduous trees from Europe.

The nun moth is a serious pest of trees in Europe; in order to prevent its introduction into Canada, this regulation requires all shipments of trees originating in Europe to be accompanied by a certificate indicating that they originated in an area free from this pest.

Regulation No. 17 (Foreign) New. P.C. 559

Prohibiting the importation of elms from all European countries.

The Dutch elm disease is a very serious infection of elms; it has spread into many European countries. As it is impossible to determine by inspection whether a tree is infected or not, and thus prevent its introduction into Canada, the importation of elms is prohibited.

Regulation No. 1 (Domestic) 3rd Revision. P.C. 559

Restricting the movement of nursery stock from Nova Scotia, Prince Edward Island and New Brunswick on account of the apple sucker.

This European insect which infested certain sections of Nova Scotia and New Brunswick was found to have invaded Prince Edward Island. The regulation was amended to include the latter province in the quarantine area, and the regulations dealing with the movement of nursery stock were applied to that province.

Regulation No. 2 (Domestic) 7th Revision. P.C. 559

Restricting the movement of corn from certain sections of Ontario and Quebec on account of the European corn borer.

This regulation was amended by including in the quarantine area those districts found infested by the European corn borer during the scouting season of 1927.

Regulation No. 7 (Domestic) Rescinded. P.C. 559

Prohibiting and restricting the movement of conifers and Christmas greens from certain sections of Quebec.

This rescission was passed as the outbreak of the gypsy moth in southern Quebec had been brought under control, making it unnecessary to prohibit, restrict or certify shipments of Christmas trees from the previously infested districts.

Regulation No. 9 (Domestic) New. P.C. 559

Restricting the movement of poplars and willows from certain sections of British Columbia.

The satin moth, an European insect, has become established in the coastal sections of southern British Columbia. It is a serious pest of poplars and willows. In order to prevent its distribution into the interior of British Columbia or the prairies, the movement of its host plants from the infested area is prohibited.

Fruit Insect Investigations

Such investigations as were conducted during the year were directed from field stations established in fruit-growing districts. Reference to the insects studied and reported upon will be found under "Field Laboratories."

Insecticide Investigations

One of the most important problems under review is the development of a combined insecticide and fungicide spray for fruit trees that is more effective and at the same time less harmful than the spray materials used at present. This project which has been under experimentation during recent years will be continued. The investigations involved extensive chemical laboratory work, co-operative work with the Division of Botany, of the Experimental Farms Branch, and much field plot work, some several hundred plots alone being devoted to this project. Numerous orchard tests were conducted with mercury compounds but the results were not promising. Mixtures of lime-sulphur with various metallic sulphates such as aluminium sulphate, iron sulphate and zinc sulphate, with and without different insecticides were tested on a comprehensive scale. While the results obtained were varying, sufficient data were obtained to lead our officers to abandon the zinc sulphate mixture. The aluminium sulphate and lime-sulphur mixture with calcium arsenate and with or without nicotine sulphate, while subject to some defects is very promising and has been tentatively recommended to growers. Many growers used this mixture in 1928 with very good results. The work on iron sulphate mixtures to date has not been quite so promising though certain modifications of the formula now in use may lead to superior results. Further experimentation is being continued with this mixture.

Large scale plot and insectary work was conducted with oil sprays against the European red mite and the apple sucker. The oils used in the numerous experiments included various mineral oils, fish oils and coal tar distillates. Mineral oils are effective in controlling the European red mite but not against the apple sucker, whereas coal tar distillates are effective in controlling apple sucker but not against the European red mite. A promising and simple method was found of using mineral oils with Bordeaux mixture. It was found that mineral oils could be poured directly into Bordeaux mixture. Perfect agitation of the mixture is necessary in order to keep the oil uniformly distributed throughout the mass.

As in recent years, an officer of the Division of Chemistry, of the Experimental Farms Branch, has been stationed at the Annapolis Royal laboratory during the summer months to assist in co-operative work on which chemical investigations are particularly necessary.

In co-operation with other Divisions of the Experimental Farms Branch and the provincial Government of Nova Scotia, a special project inquiring into the lack of set fruit in Nova Scotia was initiated during the summer of 1928. The study of bee poisoning, as one phase of this project, from almost every conceivable practical combination of spray and dust insecticides and fungicides required considerable time and disclosed interesting information. The work will be confirmed and enlarged during the summer of 1929.

Parasite Investigations

The importation, rearing and distribution of parasites of the European corn borer was carried on and further extended during 1928. From European material received through the United States corn borer laboratory at Arlington, Mass., the following liberations were made in Ontario and Quebec: *Microgaster tibialis*, 26,465 individuals; *Eulimneria crassifemur*, 2,774 individuals; *Apanteles thompsoni*, 48 individuals; *Macrocentrus giffuensis*, 17,741 individuals. These liberations were augmented by parasites bred at the Chatham parasite laboratory as follows: *Exeristes roborator*, 20,420 individuals; *Microbracon brevicornis*, 475,500 individuals; *Microgaster tibialis*, 1,202 individuals; Trichogramma minutum, 45,025 individuals. Studies in the establishment of parasites in the field were carried on and four species have been recovered, i.e., *E. roborator*, *M. brevicornis*. *M. tibialis* and *M. giffuensis*.

Investigations were initiated in connection with the oriental peach moth in the Niagara district of Ontario, and experimental liberations of the egg parasite *Trichogramma minutum* were made in three orchards. A total of 262,070 individuals was used in these experiments and the results obtained are very encouraging. Further experiments were conducted in connection with laboratory propagation of *Trichogramma* and satisfactory progress is being made.

The work in connection with the transfer of the larch sawfly parasite, *Mesolieus tenthredinis* was extended and several hundred individuals of the parasite were collected in Manitoba for liberation in Ontario. An attempt is being made to colonize it at St. Williams, Ont., where a serious outbreak of sawfly is now in progress.

Much valuable parasite material was received during the year from the parasite laboratory of the Imperial Bureau of Entomology located at Farnham Royal, England, and a new field of possibilities has been opened up in connection with the biological control of pests in Canada. The introductions from this source during 1928 included parasites of the European earwig liberated at New Westminster, B.C.; parasites of the greenhouse whitefly at London, Ont.; parasites of the pine shoot moth at Hamilton and Niagara Falls, Ont.; and parasites of the European lecanium scale at North Vancouver, B.C.

Many experiments are in progress relative to the technique of breeding, storing, colonization, and biology of the various species of parasites. Also in connection with all studies of insect pests throughout Canada much attention is being given to the parasites and other natural control factors with a view to augmenting their action wherever considered practical.

Mosquito Investigations

Educational and research work in connection with mosquito control was continued during 1928. Increased interest in these pests was manifested in many parts of the Dominion, and a number of active mosquito control organizations are now functioning in several important centres. There is a growing demand from these organizations and various other sources, for technical advice and information regarding mosquitoes and problems arising in controlling them. Our officers have taken an active part in satisfying this demand, and in this connection, Entomological Branch Circular No. 62, entitled, "Mosquito Control in Canada," was published by the Department in March, 1928. During the year, mosquito control operations, conducted largely under our advice and direction, were in progress at Montreal, P.Q., Ottawa, Ont., Orillia, Ont., Camp Borden, Ont., Winnipeg, Man., Banff, Alta., Kamloops, B.C., and Harrison Lake, B.C., and there is every indication that the number of municipalities thus engaged will increase considerably in the near future.

Faunal surveys, taxonomic studies and investigations into the biology and control of mosquitoes have been continued and the information secured from this work is steadily increasing in volume and importance. During 1928, mosquitoes were prevalent to an unusual degree in many parts of the Dominion, owing to high river levels with attendant flooding of breeding areas, and frequent heavy rains.

Household Insects

Numerous requests for information regarding household insects and their control, were received during 1928. The majority of these inquiries concerned such prevalent pests as clothes moths, carpet beetles, houseflies, cockroaches, ants, bed bugs, book lice, fish moths, etc., and our officers were enabled to disseminate much useful information among the public, regarding them. A comprehensive and well illustrated bulletin dealing with household pests has been

prepared and will shortly be available for public distribution. This bulletin embodies the results of several years of research work, and will undoubtedly serve a most useful purpose.

During the year, life-history and related biological studies were continued on a number of species of household insect pests, and further data were accumulated regarding the value of superheating, fumigation, and various insecticides.

Insects Affecting Stored Products

During 1928, in July, a survey was made of a number of flour mills in southern Ontario, and observations were taken on prevailing insect conditions and control practices. The Mediterranean flour moth was found to be the most prevalent species infesting flour mills, particularly old, poorly constructed mills, where it was difficult to apply effectively such control measures as superheating or fumigation. Large numbers of a hymenopterous parasite of the flour moth, of the species *Nemeritis canescens* Grav., were found in a badly infested mill near Toronto.

During the year numerous inquiries regarding stored product insects were dealt with. A considerable body of information concerning these pests has been included in the bulletin on household insects prepared recently for publication by the department.

Indian Orchard Work

As in other years, the Dominion Entomologist has co-operated with the Department of Indian Affairs, by directing the work of the Supervisor of Indian Orchards in British Columbia. During the year, the Dominion Entomologist had an opportunity of visiting some of the Indian reservations of the province with the officer in charge of the work, and was pleased with the progress made. The grant under which this work is maintained is provided by the Department of Indian Affairs.

Advisory Board under the Agricultural Pests Control Act

As a member of the board, the Dominion Entomologist has, during the year, had conferences with the officer in charge of the administration of the regulations under the Act, particularly with regard to certain classes of insecticides offered for registration.

Advisory Board of Wild Life Protection

As the representative of the Department of Agriculture, the Dominion Entomologist has attended the meetings of the board held during the year. One of the most important matters dealt with at these meetings was a consideration of amendments to and the consolidation of the Northwest Game Act. The board is anxious to keep uniform in the various departments concerned all matters relating to the conservation of our wild life.

Inter-Departmental Committee on Air Operations

During the year, co-operation between the Entomological Branch and the Royal Canadian Air Service was maintained particularly in connection with airplane dusting for the spruce budworm in northern Ontario and for the hemlock looper in the Muskoka section of Ontario. Co-operation was also incepted with the Ontario Provincial Forestry Service in connection with airplane dusting work for the latter insect at Foote's May, Ont. As indicated previously in this report, it is hoped that airplane dusting will prove to be of value in the prevention of losses in our forests by certain kinds of destructive insects.

Exhibitions

The Entomological presentations made during 1928 conformed largely to those of the last two or three years, and the high standard of excellence set on former occasions was well maintained.

Prominent displays were erected at Toronto, Ottawa, Sherbrooke, London, Vancouver, and at many of the smaller exhibitions and county fairs. Besides these, two extra events were arranged for, namely, the Prince Albert Fair at Saskatoon in August, and the Royal Winter Fair at Toronto in November. The first, while designed somewhat on a small scale, formed part of a larger exhibition, erected by the Experimental Farms Branch at Ottawa. The second, as a result of the success attained the previous year when a co-operative display was made on the occasion of the celebration of the Jubilee of Agriculture in Canada, was staged again under the same arrangements. At this exhibition, large numbers of people visited the stand and much useful information was given in answer to the many requests received.

The two outstanding events of the year's work were the displays at the Canadian National Exhibition in August and September, and the Royal Winter Fair in November, and it is noteworthy that the general public took more than a passing interest in the many excellent illustrations and material brought together on these occasions. The beauty of the exhibits, the skill and technique expressed in the constructing of models and mounts caused much surprise and many eulogistic commendations at all these displays; the more important phases of entomological work were presented, while in certain instances special efforts were made to bring before the public in a more pronounced manner such pests as the European corn borer, the hemlock looper, the Japanese beetle, the tarnished plant bug, the wheat stem sawfly and many other insects of great economic importance.

Officers of the branch were in constant attendance on these various occasions to answer questions and distribute literature. In this way, a great deal of valuable information was disseminated.

For the past seven years, this part of the Branch's work has been placed regularly before the public's attention, and as time has gone on there has been a steady development from small beginnings to the large, fine displays now erected.

The importance of these exhibitions, especially from an educational viewpoint, as well as an advertising medium, is quite evident, and judging from the public's reception and the generous encouragement given in the past by the farmers, fruit-growers, gardeners and others to this work, the future holds for further expansion and development.

National Museum of Canada

The temporary exhibits of insects and their work, installed in the National Museum, attracted a good deal of interest during the year. As Honourary Curator of Entomology, the Dominion Entomologist arranged for the publication by the museum of two important insect memoirs, prepared by officers of the Entomological Branch.

Insect Pest Survey

During 1928, the Insect Pest Survey, which first came into being in the fall of 1922, underwent considerable development. The survey has as its principal object the establishment of a complete and accurate record of the distribution, prevalence, hosts and natural enemies of the insect species of economic importance in Canada. There are now on file at Ottawa, more than 14,000 records dealing with nearly 3,000 species of insect pests. In addition to developing the permanent record, the survey continued to issue a monthly review of entomological conditions to entomologists throughout the Dominion, during the growing season.

Meetings

During the year, the Dominion Entomologist attended international conferences at Ithaca, N.Y., New York, N.Y., Atlantic City, N.J., etc., as well as many meetings in Canada. The Associate Dominion Entomologist represented Canada at the Empire Forestry Congress held in Australia and New Zealand. Important meetings were also attended by other officers of the Branch. The Chief of the Division of Foreign Pests Suppression, presided over an important conference of plant inspection officials held in New York City under the auspices of the American Association of Economic Entomologists.

Field Laboratories

ANNAPOLIS ROYAL, N.S.

The staff of this laboratory has been, as usual, more particularly concerned with investigations of insecticides, but during 1928 a study of certain more prominent pests was continued. Certain species of budmoths and leaf rollers have been particularly injurious in Nova Scotia during the past few years. Biological studies of this group were continued, work on some of the species being completed, and on others progress has been made. Experiments on control measures against the above group of pests have been carried out. In 1928, work was completed against the eye-spotted budmoth, definite and effective control measures having been devised and extensively put into practice by growers. Experimental work on other species is progressing. A very considerable amount of experimental work was carried on against the European red mite, and the best method of control for Nova Scotia conditions was found to be the application of an oil spray applied simultaneusly with the fungicide and with the nicotine, which are applied at a very critical time for the control of scab and budmoth. Work was vigorously pushed forward on the development of more satisfactory spray mixtures. The aluminium sulphate and lime-sulphur mixture with calcium arsenate and with or without nicotine, has been developed at this laboratory and provisionally recommended to growers for trial. This was used extensively by orchardists last year and appears to be definitely superior in certain particulars on the apple to the more common insecticide-fungicide combinations now in use.

Spray and dust calendars were prepared in co-operation with other services; assistance was given in a "spray service", numerous lectures were delivered throughout the season, and a very attractive entomological exhibit was displayed at seven of the more important local fairs.

FREDERICTON, N.B.

Our investigations of the biologies of forest insects were continued during 1928, the greaest attention being paid to the bark and wood borers of coniferous trees. Studies of the bark-beetles have given our officers an entirely new viewpoint on the habits of these insects and will have an important bearing in future methods of control. A survey of the area of southern New Brunswick infested by the European beech bark louse determined that the outbreak in the province was beyond our control. The possible importation of parasitic and predatory insects from Europe appears to be the only hope of checking this injury. The larch sawfly infestation in New Brunswick which had been increasing steadily for several years was reported to be less severe in 1928. Extensive defoliation to poplar trees by the poplar sawfly was noticed, but very little serious injury was apparent.

The field crop insect studies had to do with the life-history of the carrot rust fly, the potato stem-borer, and several species of cutworms. The outbreak of the bronze cutworm on the Tantramar marsh was specially investigated. Control experiments were carried out in connection with the currant fruit fly, carrot rust fly and seedcorn maggot. In all, two hundred and forty control plots were treated and observed with good results. Special attention was given to the investigation of various insect injuries reported in connection with farm and garden crops and in advising on the farms the best method for control.

In co-operation with the local representatives of the Experimental Farms Branch, Live Stock Branch and Seed Branch, the broadcasting of papers on agricultural subjects was carried on through Radio Station C.F.N.B., Fredericton. During the year, the laboratory presented fifteen papers, three dealing with forest insects, three with fruit insects, one with plant inspection, one with mosquito control and the others with field crop insects.

HEMMINGFORD, P.Q.

The work of this laboratory has been concerned chiefly with insects affecting fruit and field crops. The study of the life-history and control of the round-headed apple tree borer was very considerably advanced. Its control with calcium cyanides in combination with several kinds of oils, especially raw linseed oil has been successful. The use of the calcium cyanide-raw linseed oil mixture for the control of the mottled willow borer, the poplar borer and the carpenter worm in maple, has given excellent results. Nicotine, lead arsenate, and oil sprays have not been found to be satisfactory for the control of the cherry case-bearer on apple. Extension work for the control of the apple maggot continues to give satisfactory results. In collaboration with the provincial entomologist a spray calendar for apple and plum orchards was published. The study of the biology and control of white grubs has progressed very considerably. Probably, the most important result has been the value of sulphur dust as a repellent to oviposition. A great deal of information on the habits of white grubs, has been obtained both in the field and in the laboratory. It is expected that important injury from these pests will take place in 1929. To guard against this, farmers have been informed regarding the agricultural practices to adopt. Other insects receiving attention were the European corn borer and those affecting seed formation in clover. Experiments with certain dusts and sprays for apple orchards were undertaken and valuable data obtained. Through publications, lectures, exhibits and correspondence, efforts have been made to assist farmers and fruit-growers in controlling insect pests.

OTTAWA, ONT.

Investigations of vegetable and garden insects during the year at this laboratory, were concerned chiefly with studies of the onion maggot and the tarnished plant bug. Very material progress was reported in both studies. The promise of effective control of the onion maggot has been borne out by further demonstrations; definite progress was made in securing control with cheaper materials for home mixing. The tarnished plant bug studies have progressed favourably and indicate that the control problem is a much more intricate one than formerly supposed, necessitating much further study. Satisfactory progress has been made in the study of the biology and control of garden slugs, and the carrot rust fly. A survey of the occurrence of the cyclamen mite in eastern Ontario and southwestern Quebec was undertaken from this laboratory. Continuation studies of the comparative seasonal rate of development and growth of insects and plants throughout Canada with a view to the proper

timing of the distribution of information for the control of insect pests from the central office have also been made. Close contact was maintained with local vegetable growers, particularly throughout the growing season; many enquiries for insect advice were received.

Investigations were continued from this laboratory on insects affecting shade trees in Eastern Canada, special attention being given to the insect enemies of the sugar maple groves. A detailed biologic and ecologic study is being conducted on a maple grove a few miles from Ottawa with a view to determining the conditions which govern the habits of insects affecting the sugar maple and the entire relations between the insects and the health of the trees. Investigations were continued on many other shade tree insect pests.

VINELAND STATION, ONT.

The oriental peach moth investigations, the most important project conducted from this laboratory, was continued. Precise biological studies were made in the new wire screen insectary at Vineland Station and under orchard conditions at St. Davids. Cultural and burying experiments, and experiments with penetrating washes against the overwintering larvae and with various spray materials against the eggs and recently hatched larvae were conducted, but we regret to say none of this work produced a satisfactory remedial measure. A preliminary experiment with bands indicated that banding as a simple means of reducing the overwintering population on the trees is worthy of investigation. There was quite a substantial spread of the peach moth in the Niagara peninsula, but in most of the previously infested orchards there was a very marked decrease in the amount of injury due to parasitism and other natural control factors.

Studies of the life-history and habits of the codling moth were more or less completed. Experiments with larvicides, arsenicals, various bands, including chemically treated bands, cultural measures and soil fumigants were conducted, and different methods of treating culls were tested.

The study of the red spider as a pest of bush fruits was continued. In addition to generation studies, observations were made on natural control factors and experiments were conducted with various spray materials.

Further studies with lubricating oil sprays demonstrated that annual applications of 3 per cent oil may be used with safety on pears for five and on sweet cherries for four successive years without causing a vestige of injury; that annual applications of 10 per cent oil can be made with safety on pears for at least three years; that Bordeaux mixture may be used in combination with a 3 per cent oil against the European red mite; and that, in the case of apples, a delayed dormant application of oil followed by a "pink spray" of lime sulphur may cause serious foliage injury. It is gratifying to report that recommendations regarding oil sprays were very generally adopted, and that little or no difficulty was experienced by growers in making satisfactory emulsions.

Observations were made on practically all the major insect pests of fruit trees. Generally speaking, outbreaks of these were less numerous and less intensive than in 1927. Spraying experiments in apple, pear, plum and cherry orchards and in a bush fruit plantation were carried on. An investigation on the possibility of growing pyrethrum in the Niagara district for insecticidal purposes was initiated. As usual a very considerable amount of extension work was done, such as addressing fruit-growers' meetings, answering letters and inquiries received over the telephone, visiting orchardists regarding special control problems, publishing articles on insect control and assisting the Niagara spray service.

STRATHROY, ONT.

Insect problems under mixed farming conditions in southwestern Ontario continued to be the chief concern of the officers of this laboratory. Cutworms responsible for severe and continuous losses to crops planted in sandy land were given special study. Excellent progress was made with these studies and the important influences of certain crops and cultural practices on subsequent cutworm abundance was clearly shown. Investigations looking to the forecasting of armyworm outbreaks and the survey of the Hessian fly situation were conducted during the year. The preparation of wax mounts of insects and their injuries, for exhibition and museum purposes was continued. Some of these mounts have been shown at important agricultural exhibitions, fall fairs and in the National Museum of Canada. They are being brought together in the Entomological Branch Museum at Ottawa, where they form a permanent exhibit for the information of the public.

CHATHAM, ONT.

The field crop insect investigations at this laboratory were concerned chiefly with the European corn borer and the Mexican bean beetle; some attention, however, was given to tobacco insects and studies of Canadian flea beetles were continued.

In connection with the European corn borer, special attention was given to the analysis of the factors responsible for the success of the present control recommendations, as also to the new factors making for unexpected and rapid increase in numbers of the pest in the area of severe loss. Other projects included a study of the likelihood of severe infestation throughout the corn growing area of the infested territory and of the ability of the borer to survive the winter throughout the entire infested area from Sault Ste. Marie to southern Quebec. The study of the best methods of putting the recommended control practices into use on the individual farms with the tools available or easily acquired (a co-operative project with the province of Ontario), was also continued. Material progress has been made in the general study, but the improved methods in the mechanics of control have been of the most immediate benefit.

The Mexican bean beetle studies indicated that the year was not favourable for its increase. Information on its life-history was secured.

Studies relating to the biological control of insects are being developed in co-operation with the Parasite Laboratory in England, maintained by the Imperial Bureau of Entomology.

TREESBANK, MAN.

Studies of field crop insects, those kinds already established and others which feed upon native vegetation and which may become destructive to cultivated crops in the eastern section of the prairies, are conducted at this laboratory. The importance of recognizing the immature stages of grasshoppers is recognized by our officers in order that prompt recommendations for control may be made in the beginning of an outbreak of these insects. Forty species of grasshoppers have been under study by the officer in charge of this laboratory. Very satisfactory progress in these investigations have been made, the results of which will be directly applicable throughout the grasshopper-infested area.

The prevalence of wheat-stem sawfly, Hessian fly and prairie cutworms was carefully appraised by surveys and other methods with advance information regarding insect abundance; our officers are in a position to advise the farmers as to the pests which may require attention. A careful study of the sweet clover leaf miner was continued, as also studies of the native insects found attacking leguminous and cruciferous plants.

Public interest in the work of this laboratory continues to develop. During the year 999 visitors called at the laboratory to consult the officer in charge and to view the insect exhibits.

SASKATOON, SASK.

Investigations in the control of wireworms and the bertha armyworm, and a study of the relation between crop rotation and the abundance of injurious insects, continued to be the major projects at this laboratory. Cutworms, particularly the red-backed cutworm, and related species, have, also, been under close observation in view of the possibility of another outbreak occurring in the near future.

Of the important projects, the wireworm studies were given the greatest attention. The field of investigation widened to include observation points, under controlled conditions, in neighbouring provinces, and these, with the co-operative field demonstration work made possible with the assistance of neighbouring Experimental Farms, have enabled the project to progress most favourably. The crop rotation and insect abundance project was extended during the year through the co-operation of the University of Saskatchewan, thus insuring continuous control of the fields under study for a number of years which will add greatly to the value of the results.

A widespread and injurious outbreak of the bertha armyworm during the season necessitated considerable control extension work through newspapers, local government officials, and discussions with farmers. Close co-operation with officials of the local Department of Agriculture and the University of Saskatchewan was continued during the year.

INDIAN HEAD, SASK.

The officers of this laboratory have devoted themselves principally to a fundamental study of the circumstances under which infestations arise in the native woodlands and in plantations. This has involved a thorough investigation of the physical conditions prevailing in different parts of the woodlot and of the fluctuations due to meteorological changes. Any corresponding changes in the insect population are carefully noted as well as the further consequences which may affect the inter-relations of these insects. The utimate object in view is the forecasting of the occurrence of insect outbreaks based on a knowledge of their causes, and the determination of their probable course and importance. This study will aid materially in the judicious application of known control measures and in the devising of new methods whenever such may be required. Special studies were also made in the biology and control of the Bronze birch borer, the larch sawfly, the pine leaf scale, and two species of mites affecting evergreens. Nurseries and plantations were inspected, numerous inquiries concerning the control of shade tree insects were answered and a small exhibit was prepared for the Agricultural fair at Regina.

LETHBRIDGE, ALTA.

Of the prairie field crop insects under study at this laboratory, the wheat-stem sawfly and the insects affecting the seed set of alfalfa were those chiefly investigated.

The wheat stem sawfly studies were continued along the lines found so promising in 1927. Field demonstration, on a large scale, of the value of trap crops in protecting wheat from infestation and loss from this insect were most successful. The alfalfa seed production studies were carried on under most adverse weather conditions, seriously interfering with the progres of our own part of the work and precluding the co-operation usually received from local

farmers. The weather in the early season, and the bertha armyworm outbreak in the late season, rendered the progress of this study much less satisfactory than would normally have been expected.

Two extension control campaigns were conducted; one of these in the early season was in the sugar beet growing area of southern Alberta for the control of an outbreak of the red-backed cutworm. This work was organized through the field men of the sugar companies and was very successful. The other, during the late summer, was to control a widespread outbreak of the armyworm present throughout most of the agricultural part of the province south of Edmonton. The control campaign was carried on chiefly in the alfalfa and sweet clover growing areas where the most severe damage threatened and in which very material savings of crop were accomplished.

VERNON, B.C.

The fruit insect investigations conducted from this laboratory related mainly to the life-history and control of the woolly aphis of apple. The alarming spread of perennial canker which is largely due to re-infection by the woolly aphis made this study of major importance and no other fruit insect studies of any size were attempted. The life-history of the woolly apple aphis and its near relatives were carefully studied and many interesting points differing from its life-history in Eastern Canada were found. Our officers are now in a position to turn their attention to experimental control work. The woolly aphis work is being undertaken in close co-operation with the Summerland plant pathologist.

Work was continued with various dusts, and oil sprays for the control of fruit insects, and various minor problems were studied.

Field crop investigations conducted from the laboratory related to the life-history and control of the onion maggot, cutworms, potato beetle, and grasshoppers. During 1927 the grasshopper outbreaks had reached the lowest point in their cycle and during 1928 there was every evidence that they are again on the increase throughout the cattle ranges of the province, and as a result considerable poisoning was done. During the year, the officer in charge of the fruit and field crop insect investigations, accompanied the Dominion Entomologist to the Chilcotin district, where grasshoppers are apparently again on the increase.

The forest insect laboratory at Vernon during 1928-29 conducted biological studies of several species of bark-beetles which will take several years to complete. All outbreaks in western yellow pine have been controlled and are now being checked from year to year to determine the exact effect of the control measures and determine the cycle.

At the request of the Dominion Forest Service and the Provincial Forest Branch a campaign of education was conducted among the various forest officers, and a general reconnaissance of forest areas to determine the spread and existence of epidemics was undertaken. In this connection arrangements were made for reporting outbreaks in their initial stages, so that co-operative control measures might be applied before the epidemics had assumed such proportions as to be beyond economic control.

Our officers are extending their investigations to other forest injuries such as the hemlock looper, cedar borer, and spruce budworm. Results of these studies, as well as those of taxonomic studies, have been published during the fiscal year.

The valuable forest survey of British Columbia and western Alberta and the biological studies are still in progress, particular attention being paid to the relation between the work of the insect and the injury caused to the timber or to the vitality of the trees.

The public interest in our various problems is increasing as evidenced by the many inquiries for information during the year.

CRANBROOK, B.C.

The temporary field station at Cranbrook was again maintained in 1928. The potato beetle campaign in the Kootenay district was directed from this laboratory with very gratifying results, and is now in such good shape that less detailed supervision by Dominion officers will be necessary during 1929.

The bertha army worm, *Barathra configurata*, occurred for the first time at several points in the province in severe outbreak form, and extension work and control experiments were conducted in the Kootenays.

The life-history and control of the onion maggot were studied. Comparative tests with mercury bichloride and Bordeaux-oil were made.

KAMLOOPS, B.C.

In May, 1928, a laboratory for live stock insect investigations was established at Kamloops. This location is a most suitable one for the study of such pests. Much time was devoted to a survey of live stock insect conditions in various parts of British Columbia, and a large amount of valuable data was collected. Warble flies, ticks, fly repellants, insect conditions on the high sheep ranges and the various biting flies affecting stock were given particular attention. An outstanding feature of the season was the remarkable abundance of biting flies, in general, due to the abnormally high floods and wet spring.

Biological studies of black-flies were made, and a preliminary investigation of the mosquito pest at Kamloops was undertaken.

AGASSIZ, B.C.

A considerable amount of educational and publicity work was performed in Greater Vancouver and New Westminster with reference to the control of the European earwig, which continues to be a serious pest in the coast cities of British Columbia. Extensive control campaigns were staged and supervised in Vancouver and Point Grey, a sum of $25,000 being provided by these municipalities for poisoned bait and its application in infested districts.

The hop aphis studies were largely concluded in 1928 with demonstrations indicating the value of control measures devised during the past three years.

An extensive mosquito control campaign was planned and supervised at Harrison Hot Springs. This resulted in a considerable reduction of the pest and was commented upon very favourably.

A beginning was made in 1928 in the natural control of the earwig and the Lecanium scale in the coast cities, several hundred parasitic flies having been received from the Chatham, Ont., parasite laboratory and liberated in North Vancouver and New Westminster.

Experiments with nicotine dust as a control for the hop-flea-beetle and the potato flea-beetle were conducted during the season, proving that this remedy is just as effective for those species as for the cabbage flea-beetle. Hop growers have already adopted this method of control in preference to older and less effective measures.

Preliminary observations on the damage caused by slugs were made in 1928, and some tests for their control with bordeaux mixture were made.

VICTORIA, B.C.

Experiments in connection with the production of a cheaper bait for strawberry root weevil were continued in 1928. The Saanich Fruit Growers' Association placed 500 pounds of waste raisins at our disposal for experimental work. After certain alterations to machinery, installed at the Saanich Farmers' Exchange, had been made, a method of mixing the new raisin-shorts bait was

evolved and about half a ton of bait was turned out and distributed for trial among local growers. This bait gave 97 per cent control of the weevil in trials made by us and reports received from growers who had tried it were equally satisfactory. This bait can be obtained by the growers for eight cents a pound as compared with a price of twelve cents a pound previously paid for patent bait and it is expected that in 1929 a considerable saving in the cost of bait will be effected in the district.

Poisoning operations for the control of earwigs in the city of Victoria and neighbouring municipalities were again supervised by our officers. Several new infestations were discovered, but the spread of the earwigs is comparatively slow owing to the efficiency of the campaigns conducted each year. Indications are that new infestations are caused by earwigs brought in from outside sources and not by spreading from original infestations.

Investigation of the infestation of cherries by cherry fruit worm was continued in 1928. Experiments were conducted on a fairly large scale with various spray mixtures. Summer oils and nicotine sprays reduced infestation very materially, the percentage of wormy fruit averaging 3 per cent on the sprayed trees as compared with 11 per cent on the checks. Infestation was much lighter this year but in former years has frequently occasioned a loss of 30 per cent. Experimental work is being continued.

Experiments leading to the control of narcissus fly were continued. Applications of soil insecticides for control of the eggs gave indications that positive control could be obtained by this means, but the experiments are not yet concluded. Bulb plots for this experiment were furnished by the Sidney Experimental Station.

A specal exhibit was made at the fall fairs at Vancouver, Victoria and New Westminster, in co-operation with the provincial Department of Agriculture. This attracted great attention. The closest co-operation with the provincial Department of Agriculture has been maintained by us at all times.

PUBLICATIONS

The following publications were issued by the Entomological Branch during the fiscal year ended March 31, 1928:—

Pamphlets

94. "The Western Cedar Borer"—By Geo. R. Hopping.
97. "Forest Entomology and Its Development in Canada"—By J. M. Swaine.
14. "Directions for Collecting and Preserving Insects"—By J. H. McDunnough —reprint of revised edition.
102. "The Army Cutworm"—By H. L. Seamans.
103. "The Bertha Armyworm in the Prairie Provinces—By K. M. King.

Bulletin

29. "Insects of the Flower Garden and Their Control"—By Arthur Gibson.

Two important insect memoirs prepared by our officers were published by the National Musuem of Canada, namely:—

Bull. No. 52, (Biological Series, No. 14) "The Lepturini of America north of Mexico, part 1"—By J. M. Swaine and Ralph Hopping.

Bull. No. 55, (Biological Series No. 16) "A Generic Revision of North American Agrotid Moths"—By J. H. McDunnough.

In addition to the above, officers of the Entomological Branch have contributed important papers to technical journals as well as to agricultural, horticultural and other publications.

THE FRUIT BRANCH

The commercial apple crop for 1928 is estimated at 3,235,970 barrels as compared with 2,810,600 barrels in 1927 or 112 per cent of the five-year average.

COMMERCIAL PRODUCTION OF APPLES BY PROVINCES

—	British Columbia	New Brunswick	Nova Scotia	Ontario	Quebec	Canada
	Barrels	Barrels	Barrels	Barrels	Barrels	Barrels
1924	849,574	31,250	1,276,225	684,810	71,175	2,913,034
1925	932,673	40,000	956,060	950,140	70,900	2,949,767
1926	1,311,800	30,000	927,370	573,600	111,600	2,954,370
1927	1,079,500	28,000	925,000	673,500	104,600	2,810,600
1928	1,457,720	22,000	1,089,000	561,300	105,950	3,235,970
Five-year average (1924-1928)	1,126,253	30,250	1,034,731	688,670	92,845	2,972,482

APPLE EXPORTS FOR SEASONS 1924-1929

—	Barrels	Boxes
1924-25	1,170,770	493,309
1925-26	1,156,064	628,144
1926-27	688,270	805,190
1927-28	654,478	568,340
1928-29	721,656	899,490

SMALL AND TENDER FRUIT PRODUCTION, 1926-27-28

—	1926	1927	1928
	bush.	bush.	bush.
Cherries	201,640	216,800	271,250
Peaches	237,950	347,580	605,770
Pears	266,440	332,200	255,430
Plums and prunes	346,800	263,200	480,010
	Qts.	Qts.	Qts.
Raspberries	4,744,500	5,232,700	430,680
Strawberries	9,739,000	10,946,200	11,364,740
Other berries	4,195,000	3,737,000	3,324,340

POTATO PRODUCTION

The total potato production for Canada last year amounted to 50,195,000 cwt. as compared with 46,458,000 cwt. in 1927.

The following table shows the acreage and yield by provinces for 1928:—

—	Area	Total yield	Merchantable yield
	Acres	cwt.	cwt.
Prince Edward Island	51,890	5,708,000	4,795,000
Nova Scotia	30,685	3,280,000	2,690,000
New Brunswick	52,239	6,776,000	5,827,000
Quebec	164,000	13,071,000	9,673,000
Ontario	181,241	11,875,000	8,669,000
Manitoba	31,054	2,585,000	2,223,000
Saskatchewan	42,800	3,052,000	2,747,000
Alberta	28,366	2,220,000	1,931,000
British Columbia	16,788	1,628,000	1,319,000
Canada	599,063	50,195,000	39,874,000

ONION PRODUCTION

The total onion production for Canada last year amounted to 23,273 tons as compared with 25,249 tons in 1927.

The following table shows the acreage, yield per acre and total yield by provinces for 1928:—

—	Area	Yield per acre	Total yield
	acres	tons	tons
Quebec	300	10·0	3,000
Ontario	1,618	5·4	8,737
British Columbia	1,135	10·1	11,536
Canada	3,053	7·6	23,273

THE INSPECTION SERVICE

Inspections under the Fruit Act including the Fruit Export Regulations and the Standard Package Regulations, and the Root Vegetables Act, have been conducted at the principal producing, shipping and distributing centres, also a systematic inspection of factories manufacturing fruit and vegetable containers has been made. The requested inspection service has again proved of value and is maintaining its position as a factor of considerable importance in the profitable marketing of fruits and vegetables.

The following table shows the number and kind of inspections made, by Provinces, during the year ending March 31, 1929:—

Province	Administration			Standard package regulations	Requested inspection service	Total inspections
	Grading and marking, etc. regulations	Fruit export regulations				
		Reports	Permits			
British Columbia	7,893	1,548	92	42	1,835	11,410
Prairie	1,428	.....	.....	.....	412	1,840
Western Ontario	4,687	253	12	186	1,581	6,719
Eastern Ontario and Quebec	3,009	26	2	81	839	3,955
Nova Scotia	3,237	.....	.....	763	453	4,455
New Brunswick	249	.....	.....	37	4,407	4,693
Prince Edward Island	25	.....	.....	.....	3,019	3,044
Total	20,528	1,827	106	1,109	12,546	36,116

The total number of inspections made during the year under review as compared with the two previous years are shown in the following table:—

Inspection	1926-27	1927-28	1928-29
Administration	19,513	19,140	23,570
Requested Inspection Service	9,044	12,603	12,546
Total	28,557	31,743	36,116

The training of the inspection staff has again been given special attention and meetings were held at the following points: Middleton, N.S.; Charlottetown, P.E.I.; Perth, N.B.; Montreal, P.Q.; Cobourg, Toronto, Hamilton, London,

Leamington, Ont.; Regina, Sask.; Calgary, Alta.; Kelowna and Vernon, B.C. In connection with the meetings in the Prairie Provinces and British Columbia an interchange of district inspectors was effected and the exchange of opinion between the chiefs of the inspection staffs operating in producing districts and distributing markets respectively was found to be of great advantage and benefit to the inspection service.

A meeting of the district inspectors was also held in Ottawa from April 23 to 28, 1928, the main object being to insure uniformity in the administration of the Fruit and Root Vegetables Acts and in the requested inspection service.

REQUESTED INSPECTION SERVICE

This service is maintaining its position of importance to the fruit and vegetable industry generally and while no expansion on the whole can be reported during the year under review, yet there are indications that a great expansion will occur in the near future. In producing districts where the service has been voluntarily applied to a large proportion of shipments, the results have been found to be exceedingly beneficial, unnecessary losses have been practically eliminated and markets extended. In certain districts where the policy of shipping point inspection has not yet been adopted, reorganization of the industry is taking place and the policy of inspection is being seriously considered as a factor essential to profitable merchandizing.

Since the inauguration of the service the fee for inspection has been maintained at $5 per carload until the beginning of the 1928-29 season when it was found possible, in districts where a large percentage of the crop shipped was inspected, to reduce the fee to $4 per carload. This reduced fee has been in operation in New Brunswick and Prince Edward Island during the greater part of the past season.

Total inspection certificates issued and revenue collected since the inauguration of the service are as follows:—

Year	Certificates issued	Revenue
		$
1924-25	2,839	14,190 00
1925-26	4,060	19,819 50
1926-27	9,044	43,471 00
1927-28	12,603	61,449 00
1928-29	12,546	57,459 50

The following table shows the number of requested inspection certificates issued by provinces as compared with the two previous years:—

District	1926-27	1927-28	1928-29
British Columbia	4,580	4,475	1,835
Prairie Provinces	678	614	412
Western Ontario	1,859	1,002	1,581
Eastern Ontario and Quebec	604	706	839
New Brunswick	230	3,086	4,407
Nova Scotia	176	152	453
Prince Edward Island	1,070	2,568	3,019
Total	9,044	12,603	12,546

THE FRUIT ACT

The following table shows the number of packages of various kinds of fruits inspected during the year ending March 31, 1929:—

Product	Number of packages in lot	Number of packages inspected	Bulk shipments inspected
Apples.....Barrels	427,725	52,656	.....
Apples.....boxes..	3,478,834	148,568	.....
Apples.....baskets	70,961	13,434	.....
Apples.....bulk	.....	.....	18
Pears.....barrels	613	121	.....
Pears.....baskets, etc.	107,503	9,108	.....
Peaches.....baskets, etc.	139,509	11,462	.....
Plums.....baskets, etc.	192,293	15,644	.....
Tomatoes.....baskets, etc.	340,160	30,117	.....
Small fruits.....baskets, etc.	426,779	58,073	.....
Grapes.....baskets, etc.	379,250	36,739	.....
Miscellaneous fruits.....baskets, etc.	504	504	.....
Mixed fruits and vegetables.....Packages...	733,360	27,755	.....
Frozen raspberries.....Barrels.....	2,130	475	.....
Total.....	6,299,621	449,656	18

Inspections of various fruits during the year, as compared with the year ending March 31, 1928, were as follows:—

Product	1927-28	1928-29
Apples.....	10,909	13,250
Peaches.....	571	713
Pears.....	389	602
Plums.....	444	965
Tomatoes.....	1,662	1,601
Small fruits.....	2,813	3,793
Grapes.....	292	431
Mixed fruits.....	1,356	1,294
Fruits and vegetables.....	756	357
Miscellaneous.....	314	194
Total.....	19,506	23,200

The number of violations reported under this Act and the number of prosecutions during the year under review as compared with the previous year are as follows:—

Year	Number of violations	Number of prosecutions	
		Domestic fruit regulations	Imported fruit regulations
1927-28.....	1,257	10	4
1928-29.....	1,527	43	8

ROOT VEGETABLES ACT

The following table shows the number of packages of various vegetables inspected during the year ending March 31, 1929:—

Product	Number of packages in lot	Number of packages inspected	Bulk shipments inspected
Potatoes.....bags	2,787,698	173,727	.....
Potatoes.....15 lb. bags	18,000	825	.....
Potatoes.....bbls.	53,455	11,962	.....
Potatoes.....bulk	.....	.....	2,677
Sweet potatoes.....hmprs.	658	42	.....
Onions in bags.....	224,044	13,751	.....
Onions in crates.....	65,913	3,698	.....
Miscellaneous vegetables.....	413	413	.....
Total.....	3,150,181	204,418	2,677

The total number of inspections made during the year under review as compared with the previous year is as follows:—

Product	1927-28	1928-29
Potatoes.....	9,447	10,142
Onions.....	885	1,136
Other vegetables.....	263	423
Total.....	10,595	11,701

The number of violations reported under the Act and the number of prosecutions during 1928-29 as compared with 1927-28 is as follows:—

Year	Number of violations	Number of prosecutions
1927-28.....	511	1
1928-29.....	429	7

FRUIT EXPORT REGULATIONS

Certain changes have been made in these regulations whereby apples, pears, and plums exported to the United States are not required to be inspected before shipment, also gift shipments of five or less packages are exempted. As in previous years these regulations did not apply to fruit exported from Nova Scotia.

The following table shows the number of export certificates and release permits issued and revenue collected, by provinces, for the year ending March 31, 1929:—

Province	Export certificates	Release permits	Revenue
			$ cts.
British Columbia.....	1,548	92	7,043 40
Ontario.....	253	12	1,232 25
Quebec.....	26	.....	107 80
Nova Scotia.....	.....	2	10 00
Total.....	1,827	106	8,393 45

The total certificates and permits issued and revenue as compared with the year ending March 31, 1928, is as follows:—

Year	Export certificates	Release permits	Revenue
			$ cts.
1927-28	1,510	689	6,890 40
1928-29	1,827	106	8,393 45

STANDARD PACKAGE REGULATIONS

Under these regulations all factories manufacturing barrels, boxes, baskets, crates, berry boxes and other fruit containers were inspected and the following table shows the number of inspections made as compared with the two previous seasons:—

—	1926-27	1927-28	1928-29
Inspections	773	943	1,109

ONION STORAGE WAREHOUSE

This frost-proof storage warehouse built to facilitate the proper marketing of the onion crop of the Leamington district has again proved of value and has been patronized to practically full capacity.

The onions are stored in 50-pound crates and up to the year under review, a fee of 16 cents per crate was charged irrespective of length of storage. At the beginning of the season 1928-29 it was found possible to reduce the fee to 12 cents per crate.

The following table shows a comparison between stock received for storage and revenue collected during the year 1928-29 as compared with the two previous years:—

—	1926-27	1927-28	1928-29
Crates (50 lbs.)	24,773	5,572	22,772
Revenue	$ 3,962 68	891 52	2,732 64

PRESERVED FRUITS AND VEGETABLES

The Meat and Canned Foods Act in so far as it relates to preserved fruits and vegetables, was transferred to the Fruit Branch for enforcement in January, 1929, and work in this connection will be carried on in future under the direction of the Fruit Commissioner.

NOTES

Officers of the branch attended and addressed various provincial fruit and vegetable meetings, and in many cases acted as judges at fairs and exhibitions.

Educational work in the province of Quebec was continued during the past year by providing an inspector in the principal blueberry shipping district; and in Nova Scotia the Branch co-operated with the provincial Department of Agriculture in investigating the system of picking, packing and marketing strawberries in Massachusetts and in an educational campaign among the Nova Scotia growers for the improvement of local methods of packing. Experiments were

also conducted in co-operation with the National Research Council and the provincial Department of Agriculture for Nova Scotia to determine the best system of packing barrelled apples to prevent arrival on the export markets in a slack condition.

VISIT OF CANADIAN FRUIT TRADE COMMISSIONER

Mr. J. Forsyth Smith, Canadian Fruit Trade Commissioner in Great Britain, visited Canada during the past summer, and addressed meetings arranged by the Fruit Branch in the commercial fruit districts of British Columbia, Ontario and the Maritime Provinces, growers and shippers being thus given an opportunity of meeting Mr. Smith, and discussing with him current marketing conditions on the British and continental markets.

MARKETS DIVISION

The final estimate for the 1928 Canadian Fruit Crop shows an increased shipping point value of two and one-quarter million dollars over 1927. The total crop is valued at $19,824,333 as compared with $17,605,995 a year ago. While prices were generally below the 1927 level, increased revenue was made up by the larger yield obtained with most crops. Generally speaking, British Columbia experienced the largest fruit crop year in history, while Ontario and Quebec were about average and the Maritime Provinces slightly below average. The Markets Division, as in past years, collected, compiled and disseminated crop information to the industry amounting to approximately 6,000 copies of reports during the crop months from June to November inclusive. Many letters of appreciation of the present form of the crop report were received. In addition, throughout the season many of the Trade papers in Canada and the United States published the report verbatim.

The following table is the final estimate of the production and shipping point value of fruit in 1928 as compared with 1927:—

Description	Year	Total quantity	Average price	Total value
		brls.	$	$
CANADA				
Apples	1927	2,810,600	3·70	10,411,035
	1928	3,235,970	3·49	11,297,867
		bush.		
Pears	1927	332,200	2·00	663,730
	1928	255,430	1·85	473,246
Plums and prunes	1927	263,200	1·80	473,780
	1928	480,010	1·28	615,890
Peaches	1927	347,580	3·03	1,051,765
	1928	605,770	1·98	1,200,345
Apricots	1927	18,000	3·74	67,250
	1928	36,210	2·48	89,800
Cherries	1927	216,800	3·62	784,470
	1928	271,250	3·08	836,137
		quarts		
Strawberries	1927	10,946,200	0·14	1,516,145
	1928	11,364,740	0·13	1,426,990
Raspberries	1927	5,232,700	0·15	784,000
	1928	4,306,860	0·17	728,641
Other berries	1927	3,737,000	0·13	471,420
	1928	3,324,340	0·12	390,617
		pounds		
Grapes	1927	34,560,000	0·04	1,382,400
	1928	69,120,000	0·04	2,764,800
Total value	1927	.....	.....	17,605,995
	1928	.....	.....	19,824,333

VEGETABLES

Vegetable growers experienced a fairly satisfactory season with the exception of the potato growers in the eastern provinces. There is no doubt that the potato shipping season of 1928 to 1929 has been the most disastrous year to the Eastern potato growers in the history of the industry. The Maritime growers received for Canada A grade, delivered either to shipper's warehouse or siding, from 30 cents to 50 cents per barrel (165 pounds) and as low as 22 cents at certain periods of the season. The low market price level is still attributed to the increased potato yield in Canada amounting to a total of 54,585,000 cwt. or an increase of 17 per cent over 1927. The combined eastern provinces including Ontario, Quebec, New Brunswick, Nova Scotia and Prince Edward Island showed a crop of 45,000,000 cwt., which is 83 per cent of the total yield, while the western provinces had 17 per cent of the entire crop with 9,555,000 cwt. Prince Edward Island reported the greatest increase with a total crop 65 per cent larger than in 1927, while New Brunswick followed with a crop 61 per cent, Ontario 55 per cent, and Manitoba 11 per cent larger than the year previous. The balance of the provinces reported a decrease.

DOMESTIC MARKET SITUATION

Prices for practically all fruits and vegetables have ruled lower on all markets than during the year 1927 with the exception of grapes, raspberries and onions. In British Columbia f.o.b. prices, shipping point, were set by the Interior Committee of Direction. Owing to losses from rebates and claims the prices realized in many instances did not correspond with the control price. British Columbia marketed over 4,000,000 boxes of apples of which approximately 1,000,000 were exported. Considerable difficulty was experienced in marketing the crop owing to the overlapping of varieties, such as Wealthy extending over to the McIntosh period and McIntosh into the Jonathan and Early Winter period. Strawberry growers in the same province had a disastrous year owing to the poor shipping quality of the berries and the chaotic condition of the market. Eastern fruits were handled fairly satisfactorily although prices were slightly below the level of the year previous. The Ontario grape crop maintained a price of from $80 to $85 per ton to the producer which, together with the increased yield, brought in a revenue amounting to approximately 35 per cent of the total income for all fruits in the province.

Every assistance possible was given to the marketing of the large potato crop in the Maritime Provinces. With a report of shortage in Western Canada, particularly in the provinces of Saskatchewan and Alberta, an effort was made to move eastern potatoes to western points. This condition was realized in the fall of 1928 with the result that this Division took immediate action to assist in moving a volume of the crop. The situation was pointed out to Maritime shippers as well as to the Prairie distributors with the result the former called a meeting in December and drew up a request to the railroads to put a distress rate into effect. The Transportation Division of this branch rendered valuable assistance in this connection. It should be pointed out the railroads were very sympathetic to the request of the shippers with the result early in January a distress rate went into effect amounting to approximately ten cents per cwt. reduction in transportation charges. It is stated that this rate had the effect of moving several hundred cars to Western Canada.

EXPORTS

Apples are the principal fruit exported from Canada and amounted to 1,021,490 barrels during the shipping season of 1928-29 as compared with

843,560 barrels the season previous. This is an increase of approximately 21 per cent. The following table shows the apple exports by provinces:—

—	1927-28	1928-29	Per cent
	barrels	barrels	
Nova Scotia	600,090	680,840	113
Ontario	57,050	42,200	74
	boxes	boxes	
British Columbia	559,260	895,350	160
Total in barrels	843,560	1,021,490	121

From the above table it will be observed that Nova Scotia exports increased 13 per cent, British Columbia 60 per cent, while Ontario showed a decrease of 26 per cent. The United Kingdom received approximately 90 per cent of the total exports. According to the Fruit Trade Commissioner the principal features characterizing the fruit trade in the United Kingdom during the season 1928-29 have been the heavy shipments of both boxed and barrelled apples from Atlantic sources as compared with the previous season, the considerable increase in shipments of British Columbia apples, the extremely small quantity of Ontario apples reaching the market, the particularly good quality and colour of Nova Scotia supplies, the apple crop shortage on the Continent with subsequent equal demand upon such markets as those of Scandinavia and Belgium and the fact that the competition of English apples was not so keen as usual. Boxed apples were shipped in very large quantities as a result of the large crops in Washington and Oregon and were in excess of market requirements, and the season throughout was most unsatisfactory from the shipper's standpoint. Prices for boxed apples during the heavy shipping months of October and November were at a most unprofitable level, dropping as low as 7s. 6d. to 8s. In December there was some improvement which continued during the new year, but the season as a whole was very disappointing. The general level of barrelled apple prices throughout the season has been definitely lower than in the season 1927-28, which was a year of short crops and of relatively small supplies to this market.

Extension of Foreign Markets

POTATOES

The Canadian potato export trade is principally confined to the United States and Cuba. These two countries in normal seasons usually take approximately three and one-half million cwt., or about 98 per cent of the total exports. Owing to the United States having one of the largest crops on record, amounting to approximately 50,000,000 bushels surplus, this market was considerably reduced for the Canadian product. The situation in Cuba was very similar to that of the United States so far as prices were concerned, while the actual exports were not so severely reduced. The Markets Division gave careful consideration to the possibilities of exporting Canadian potatoes to European markets. The idea was conceived that perhaps the extremely severe weather in Europe during the past season would have destroyed a large portion of the crop through frost injury. In order to ascertain the situation the Fruit Trade Commissioner was requested to thoroughly investigate the situation. The Commissioner gave the matter his immediate attention and replied to the effect that there was no shortage on European markets and if there was, the Canadian product would be barred owing to existing embargoes. This applied particularly to Great Britain, Germany, Holland and Belgium. In addition the price quoted by Canadian exporters of £7 ($34) per long ton c.i.f. European ports, did not compare with potatoes from other sources which were being quoted at as low as £2 to £3 ($9.50 to $14.50) per ton.

Increased shipments of plums were exported from Ontario to Great Britain with most satisfactory results. There is every indication the British markets can handle a large quantity of Canadian plums during the months of September and October, which is immediately following the English crop season.

CERTIFIED SEED POTATOES

Considerable effort was also made to extend the market for Canadian certified seed potatoes. Again the co-operation of the trade commissioners was requested, and after reporting the situation in the various countries, it was decided to concentrate on the South African market. This market imports annually approximately 200 cars of seed potatoes. In order to introduce Canadian certified seed, a few bushels of the principal varieties grown in Canada were drawn from the principal certified seed-producing provinces, the varieties shipped being Green Mountain, Irish Cobbler, Dooley, Spalding Rose, Garnet Chili, Netted Gem, Up-to-Date, Epicure, Bliss, Sir Walter Raleigh, Wisconsin Pride and Burbank. The total shipment amounted to 200 crates of one bushel each, and was forwarded in ordinary ventilated ship stowage to Capetown in October, 1928, for planting in South Africa in December. All varieties landed in excellent condition and, according to one official of the Union Government in South Africa, they were the finest samples of seed potatoes reaching that port in many years. As the growing season in South Africa is just the reverse to Canada, at time of writing this report it is too early to announce the production results of these varieties, but of the Canadian varieties now under test, it has been predicted that Dooley and Green Mountain will prove most satisfactory. In addition to South Africa, arrangements have been made for a trial shipment of certified seed to the Argentine, while the possibilities of Brazil and Central American countries as well as the Strait Settlements and Malay States are being explored. Additional outlets for certified seed should prove of great benefit to the industry.

APPLES

Considerable attention was devoted to the extension of foreign markets for Canadian apples. An initial step towards developing the East Indies market for apples was made by forwarding four experimental shipments of boxed apples from British Columbia. The shipments were forwarded by a large shipping firm in British Columbia, supervised by this Division as well as being made in co-operation with the Trade Commissioner at Batavia, Java. The object of these trial shipments was to test out Canadian varieties, packing and their ability to compete with apples from other countries. Three 25-box lots were forwarded on separate steamers in refrigerated space during October, November and December consigned to Batavia, and 100 boxes in November to Sourabaya. The varieties shipped with each consignment consisted of five boxes each of McIntosh, Jonathan, Grimes Golden, Winesap and Newtown Pippin, of Extra Fancy grade, and sizes running from 175 to 216. The Sourabaya shipment consisted of 75 boxes Newtown and 25 Winesaps of same grade and sizes. Summarizing the results of these experiments, it was obvious that of the varieties shipped, Winesaps and Newtown Pippin proved the only safe kinds to send to foreign markets where transportation is of thirty-five to fifty days' duration. It is possible that one shipment each of McIntosh and Jonathan could be made but it would be a risky proposition. With the exception of the Sourabaya shipment, the prices received were quite satisfactory.

MARKET NEWS

An important function of this Division is to issue market information covering the principal Canadian and export markets. During the past year the

Telegraphic Market News-letter was published at Ottawa once weekly from January to July inclusive and twice weekly from August to December inclusive. In addition, during the twice weekly period, the reports were published and distributed from Winnipeg and Vancouver in order to get the information to interested readers with the least possible delay.

With a view to making the reports more valuable, special effort has been made to re-organize the present system of reporting on the commodity basis, together with market trends. Sample reports were drawn up and submitted to growers, shippers and members of the trade for approval and suggestions as to how it could be improved. During the early part of the new fiscal year it is hoped to put the new style of report into effect.

PUBLICITY

Special efforts were made to bring before the consuming public the value in purchasing Canadian fruits and vegetables. This publicity has been conducted through the medium of experts at the principal Canadian exhibitions as well as at the Imperial Fruit Show, England.

Another form of publicity has been through the Canadian Press and Agricultural Journal in which feature articles have been published dealing with timely information concerning the fruit and vegetable industry. In addition, similar information has been broadcast through the Canadian National link-up of radio broadcasting stations including London, Toronto, Ottawa, Montreal and Quebec. Market quotations, supplies and trends as well as the use of fruit and vegetables were given out through this medium.

During the year an educational film entitled "Growing and Marketing Canadian Apples" has been prepared in co-operation with the Motion Picture Bureau of the Department of Trade and Commerce. In addition to being used for educational purposes in Canada, it is the intention to provide the Empire Marketing Board with this film for publicity work in the motion picture theatres and at British Empire exhibitions in Great Britain.

Transportation Division

This Division devotes itself largely to the growers' and shippers' problems connected with the forward movement of fruit and vegetable products. Attention is given to all questions of rates, local or general; also investigations are constantly under way seeking improvement of facilities and correction of practices in whatever respect these are under complaint or by our own observations are thought to be capable of improvement. Details of the major activities of this Division during the past year and of investigational work presently in hand are as follows:—

During the past year we have proceeded into an investigation of the newest bunker type of refrigerator car against the brine tank refrigerator car which is standard equipment in Canada, as forecast in our report one year ago. All tests conducted in the 1928 season were with dressed meats and other packing house traffic. Tests in the season of 1929 will extend to fruit and vegetable traffic. While the evidence in hand is far from complete, it suggests over-rating of the value of brine retention, the feature of brine tank refrigerator cars. Low temperature brine, created by using salt to lower the melting point of the ice, appears to devote itself more to the consumption of more ice than to heat transfer from the product under transportation. Also the faster initial cooling performance of the newer divided basket bunker type of car should be of advantage to fresh fruit traffic, in fact to all traffic. It is thought worthy of remark that after the interim reports placed before the railways of 1928 tests, each ordered a considerable number of the new type for 1929 delivery.

Pre-cooling-by-fanning when, instead of placing the fruit in cooling chambers and afterwards loading it into cars, iced cars are loaded with warm fruit and the ordinary cooling performance quickened by the use of fans to accelerate the movement of air from the load to the iced ends and of chilled air to the load, continues to prove an excellent substitute for plant pre-cooling, and is to be used again in 1929 at two berry shipping points at least in British Columbia.

Further tests were conducted this past winter from New Brunswick with refrigerator cars specially equipped for potato traffic, following up what was done the previous winter after order of the Railway Board. Unfortunately these further tests were practically nullified by the incident that one of the specially equipped cars measured against standard equipment required abnormal artificial heating, because of concealed body fault, which fact deprives the comparative temperatures obtained of any real value.

Efficiency tests were conducted with Canadian Pacific Express blower-ventilated cars for fruit traffic in and from British Columbia, resulting in alterations of considerable benefit.

For initiation of the Canadian National Steamships' special ships for carrying bananas from Jamaica to the Canadian Atlantic seaboard, under the Canada-West Indies Trade Agreement, our electrical temperature equipment has been on loan, first for a trial trans-Canada movement of two cars of bananas under heat, and followed by a temperature report of bananas in temperature controlled space in the first sailing of this new service.

A year ago we supported Ontario shippers of plums in an application to the railways for special rating for movement of this product to Montreal for export, looking to establishing a market in the British Isles. While the venture was entirely successful for all shipments enjoying good temperature conditions in transatlantic movement, it has been represented to us that some shipments in mixed chambers were handled at unduly high temperatures, and an approach is to be made to the transatlantic lines for guarantees or greater assurances of appropriate temperatures for plums and pears. The Pear Temperatures Committee (of which the Canadian Fruit Trade Commissioner in Great Britain is a member) of the National Fruit and Potato Trades Association, is working jointly with the International Shippers' Association in a vigorous effort to induce the transatlantic lines to guarantee refrigeration temperatures for soft fruits, and, while there are practical considerations which cannot be ignored, it is anticipated that this movement will result in improved shipping conditions for whatever of our high quality soft fruits lend themselves to this marketing venture. All interested will realize that as the volume increases so will the possibilities increase for exclusive refrigerated chamber space and carriage under specified temperatures.

The Express Rates case, originally heard in 1923-24, was revived during the past year by an application of the express companies for emergent relief by increased rates, pending judgment by the Railway Board of the original submissions, with result that further hearings are to be held, dates to be fixed later. This is a matter of extreme concern to growers and shippers of fruits and vegetables, who, not having advantage of salaried representatives for attention to such matters, of necessity select committees for preparation and presentation of defensive evidence. This demands ill-afforded time at some seasons, also unusual versatility. Moreover this long-drawn-out case holds in suspense many local adjustments based on compromise, adjustment or changing traffic need, ordinarily of frequent negotiation for fruits and vegetables by express.

Considerable dissatisfaction was expressed in Nova Scotia and some in Ontario by apple exporters when in advance of the 1928 movement the Canadian Trans-Atlantic Conference introduced "Agreement" rates for this traffic,

whereby shippers were assured the rate of 90 cents per barrel in effect of recent years conditioned on their signing agreements to ship exclusively in Conference Lines' steamers from ports served by them, with a rate of $1.10 per barrel to apply on non-agreement offerings. Opposition, inspired to some extent by concern that this was a maneuver for elimination of competition and ultimate increase in these rates, was nevertheless not a majority of the apple exporters of Canada. The carriers involved are outside the jurisdiction of any established control in so far as their rate-fixing negotiations are concerned, and this circumstance was felt to merit tolerance for the present if not approval of the principle of agreement rates with their equality and seasonal stability of marketing costs. If the apprehensions of those in protest are later realized in proposals to increase these rates, we may find occasion to reopen the whole question and enquire the extent to which the arrangement now countenanced may have been a contributing factor.

CANADIAN HORTICULTURAL COUNCIL

Many matters of interest to the fruit and vegetable industry, have been given consideration by the Canadian Horticultural Council during the past year, and full information with respect to its activities may be secured from its annual report. The department continued to give this organization financial support to the extent of a grant of $8,000 for the past year.

Publications Branch

The Publications Branch distributed during the last fiscal year 3,767,717 copies of bulletins, pamphlets, circulars, and reports, not including press notices. These were not sent out in lots to central points, but quite 95 per cent went in individual wrappers, addressed to individuals or institutions from whom definite requests had been received for the publications.

This distribution, probably the largest of its kind in Canada, necessitated the addressing of 2,789,053 envelopes, and the automatic making of 44,247 new stencils in the maintenance of mailing lists.

These figures help to emphasize the important part played by the Publications Branch in the rounding out, and efficient administration of this department.

The ultimate value of the research and experimental work conducted by the officers of the department depends upon its availability for use by Canadian farmers, live stock breeders, dairymen, fruit growers, poultrymen, etc., and in this connection the Publications Branch functions. The Branch is the connecting link between the department and the practical man.

A total of 424 bulletins, pamphlets, circulars, and reports are available for distribution and these cover every phase of agricultural endeavour.

The Experimental Farms Branch publication "Seasonable Hints," of which three issues are distributed annually, has by far the biggest circulation. Last year 1,360,143 copies of "Seasonable Hints" were distributed, to a mailing list containing 404,786 names, and to banks, elevators, etc., for their farmer patrons.

Since the inauguration of market reporting services by the various branches, the demand for these market reports has steadily increased. During 1926-27, 914,130 copies of these reports were distributed. The next year 1927-28 the total increased by 28 per cent to 1,186,874 copies, and this past year 1,307,237 copies were sent out. In many instances the trade take advantage of this service to supplement their own information.

The number of new and revised publications of the regular departmental series received from originating branches during the past fiscal year totalled 150 and of these 889,097 copies were distributed.

The total distribution for the year was as previously stated. In the following table figures for 1927-28 and 1928-29 are given for purposes of comparison:—

—	1928-29	1927-28
Seasonable Hints	1,360,143	1,281,290
Market Reports, etc	1,307,237	1,333,004
Publications, new	889,097	630,802
Publications, old	211,240	459,463
Total	3,767,717	3,704,559

NEW SERVICE

One of the most important functions of the Publications Branch is the securing of publicity in the farm, weekly, and daily press covering activities of the department. For some years this service has been provided for the farm and weekly press, but the connection established during the past year with the daily press is a new service.

All events and happenings affecting the Department that may interest the "man in the street," are now written up for the dailies. Connections have been established with the papers through their press correspondents, and through the Canadian press. The demand now comes for press material from these sources, and much valuable publicity has been secured during the last fiscal year which was in addition to that secured through the agricultural press, weeklies, semi-weekly and self prints.

This has also resulted in a contact between this branch and other branches of the department which did not exist prior to the inauguration of this daily news service, and which is of mutual benefit.

MAILING LIST DIVISION

The number of envelopes addressed during the past year shows a slight falling off, but this is attributable to the revision of the Fruit Crop telegraphic list and the Fruit Crop report list.

The following table gives the comparative figures for the two years with increase and decrease:—

ENVELOPES AND SLIP LISTS ADDRESSED

—	1927-28	1928-29	Increase	Decrease
Bulletins and other printed matter	1,266,245	1,334,412	68,167	.....
Market and crop reports, etc	1,389,210	1,352,844	.....	36,366
Circular letters, press notices, etc	64,586	42,470	.....	22,116
For other branches	64,708	54,935	.....	9,773
Slip lists	29,911	4,392	.....	25,519
Totals	2,814,660	2,789,053	68,167	93,774

Automatic machinery is used for this work, and in maintaining the mailing lists over 44,247 new stencils were made for fresh applicants.

The main lists to be maintained, kept up-to-date, changes of address made, and envelopes addressed, are the "Seasonable Hints" list of some 404,786 names compared with 389,784 names last year; a special general list of 3,462 names to which all new publications are sent as soon as issued, covering the parliamentary officials, institutions, exchanges, etc.; twenty-five lists to which

Experimental Farm and Station reports are sent; and nine lists for market reports and news letters. The total number of mailing lists maintained is 103. A complete classification is not necessary. It is interesting to note, however, that the names and addresses on these mailing lists represent the cutting by automatic machinery of 473,582 plates, compared with 461,792 for last year. The changes in these lists have been less than for the previous year, 20,459 names being removed, and 1,370 changes made in addresses, compared with 24,355 removals and 2,129 changes in addresses for the previous year.

New lists have been added during the year including the Egg Laying Contest list of 525 names, to which are sent weekly the results of the contests being held at the Central Experimental Farm, and the Daily Press list containing 84 names to which is sent "up-to-the-minute" publicity matter. To the departmental library list has been added the list of members of the Canadian Society of Technical Agriculturists containing 1,049 names. The seven International Institute lists have been revised and reduced to four lists.

Five lists formerly used in connection with the World's Poultry Congress have been discontinued, also the seven lists belonging to the International Institute already mentioned.

The lists that have been revised consist of the Library list of new books; Egg Laying Contest; Record of Performance for Poultry; Record of Performance for Poultry special list of officials; American Poultry Science, formerly called American Society of Poultry Instructors and Investigators; International Poultry Science Association; Canadian Seed Growers' Association; Horticultural Council; Eastern Canada Fruit and Vegetable Jobbers; Weekly Egg and Poultry Market Review list; Fruit Crop Telegraphic; and the Fruit Crop monthly lists.

Publications issued and distribution made by the Publications Branch, April 1, 1928, to March 31, 1929:—

Branch and Title	Received	Distributed
Report of the Minister of Agriculture for year ending March 31, 1928	4,994	4,800
Report of the Minister of Agriculture for year ending March 31, 1927 (French)	1,750	1,700
Dairy and Cold Storage Branch—		
Testing of Milk, Cream and Dairy Products by Babcock Test, Bul. 14	4,975	3,560
Cold Storage for Creameries, Bull. 61	1,975	1,925
The Manufacture of Ice Cream, Bull. 102	6,475	5,875
Why and How to Use Cottage Cheese, Cir. 7	14,900	4,970
Why and How to Use Buttermilk, Cir. 8	14,900	4,900
Ice, Simple Methods, Pam. 2	9,975	4,000
Why and How to Use Cheese, Pam. 7	24,900	7,000
Why and How to Use Milk, Pam. 36	14,875	10,650
Home Frozen Desserts, Pam. 49	24,950	8,000
Surface Taint Butter, Pam. 91	7,825	6,205
Studies on Moulds and Yeasts in Creamery Butter, Pam. 92 (Part I, II, III)	6,325	5,010
Buttermaking on the Farm, Bull. 57	1,975	1,780
Notes on Cold Storage of Eggs, Cir. 50	975	700
Yield and Relative Value of Some Dairy Products, Cir. 68	850	800
The Entomological Branch—		
Insects of the Flower Garden and Their Control, Bull. 99	24,500	12,500
Mosquito Control in Canada, Cir. 62	8,400	7,775
The Disease of Rye and Other Grains and Grasses called Ergot, Cir. 69	9,900	7,247
Directions for Collecting and Preserving Insects, Pam. 14	4,500	2,780
The Western Cedar Borer, Pam. 94	2,600	1,600
Forest Entomology and Its Development in Canada, Pam. 97	500	500
The Army Cutworm, Pam. 102	1,500	500
The Bertha Armyworm in the Prairie Provinces, Pam. 103	1,400	500
The Destructive Insect and Pest Act, No. 8	1,200	1,200
Regulations under the Destructive Insect and Pest Act Supplement to A. O. R. 8	7,500	4,350
The Experimental Farms Branch—		
Report of the Director, March 31, 1928	13,600	12,300
Report of Division of Animal Husbandry, March 31, 1927	16,390	15,640
Report of the Bee Division, 1927	12,350	11,390
Report of Division of Bacteriology, French, 1926	1,900	1,900

Branch and Title	Received	Distributed
The Experimental Farms Branch—Continued		
Report of Division of Botany, (French) 1925	1,600	1,600
Report of Division of Botany (French)	2,000	2,000
Report of Division of Botany, 1927	1,480	1,470
Report of Division of Botany, 1927, Sections I and II	500	400
Report of Division of Botany, 1927, Section III	2,000	1,500
Report of Division of Botany, 1927, Section IV	2,000	1,500
Report of Division of Botany, 1927, Section V	2,000	1,500
Report of Cereal Division, 1927	8,000	7,800
Report of Chemistry Division, 1927	8,300	7,950
Report of Field Husbandry Division, 1927	12,250	11,850
Report of Economic Fibre Production Division (French), 1926	2,000	2,000
Report of Forage Plants Division, 1926, F	2,000	2,000
Report of Forage Plants Division, 1927	5,800	5,750
Report of Division of Horticulture, 1926 F	3,000	2,940
Report of Division of Horticulture, 1927	9,970	9,160
Report of the Poultry Division, 1927	21,510	20,579
Report of Experimental Farm, Agassiz, B.C., 1927	7,375	7,275
Report of Experimental Sub-station, Beaverlodge, Alta., 1926	7,450	7,400
Report of Experimental Sub-station, Beaverlodge, Alta., 1927	12,915	11,700
Report of Experimental Farm, Brandon, Manitoba, 1927	8,100	8,000
Report of Experimental Farm, Brandon, Manitoba, 1928	7,350	5,000
Report of Experimental Station, Charlottetown, P.E.I., 1927	13,875	13,095
Report of Experimental Station, Farnham, P.Q. (French), 1926	3,400	3,400
Report of Experimental Station, Farnham, P.Q., 1927	5,950	5,900
Report of Experimental Station, Fredericton, N.B., 1927	11,800	11,800
Report of Experimental Station, Harrow, Ontario (French), 1926	950	950
Report of Experimental Station, Harrow, Ontario, 1927	9,525	9,500
Report of Experimental Farm, Indian Head, Sask., 1927	5,350	5,300
Report of Experimental Station, Invermere, B.C., 1927	12,950	12,830
Report of Experimental Station, Kapuskasing, Ontario, 1927	4,850	4,800
Report of Experimental Station, Kentville, Nova Scotia, 1927	6,350	6,300
Report of Experimental Station, Kentville (French), 1926	900	900
Report of Experimental Station, Lacombe, Alberta (French), 1926	1,000	1,000
Report of Experimental Station, Lacombe, Alberta, 1927	8,550	8,440
Report of Experimental Station, La Ferme, Quebec, 1927	3,400	3,350
Report of Experimental Station, Lennoxville, Quebec, 1927	9,300	9,200
Report of Experimental Station, Lethbridge, Alberta, 1927	4,400	4,286
Report of Experimental Station, Morden, Manitoba, 1927	6,800	6,750
Report of Experimental Farm, Nappan, 1927	5,840	5,760
Report of Experimental Farm, Rosthern, Sask., 1927	5,225	5,180
Report of Experimental Station, Ste. Anne de la Pocatiere, P.Q., 1926 Fr.	3,200	3,150
Report of Experimental Station, Ste. Anne de la Pocatiere, 1927	3,350	3,300
Report of Experimental Station, Scott, Sask., 1927	23,450	23,400
Report of Experimental Station, Sidney, B.C., 1927	4,850	4,800
Report of Experimental Station, Summerland, B.C., 1927	6,350	6,300
Report of Experimental Station, Swift Current, 1927	5,900	5,850
Report of Experimental Fox Ranch, Summerside, P.E.I., 1926-27	14,910	14,720
Report of Illustration Stations in Ontario, Quebec, New Brunswick, Nova Scotia and Prince Edward Island, 1927	6,800	6,750
Report of Illustration Stations in British Columbia, Alberta, Saskatchewan and Manitoba, 1927	12,800	12,750
The Dominion Experimental Farms (A Descriptive Booklet of the Activities of)	1,800	1,500
Modern Orchard Practice, Bull. 18	800	800
Tomato Diseases, Bull. 51	15,000	5,000
Annual Flowers, Bull. 60	39,880	16,300
Sheep Husbandry in Canada, Bull. 75	9,700	4,000
Preserving Fruits and Vegetables in the Home, Bull. 77	16,560	12,060
The Strawberry and Its Cultivation in Canada, Bull. 80 (French)	9,884	1,114
Field Roots in Canada, Bull. 84 (French)	780	780
Lime in Agriculture, Bull. 86	9,800	1,400
Ornamental Trees, Shrubs and Woody Climbers, Bull. 89 (French)	9,600	6,130
Manures and Fertilizers, Bull. 92 (French)	5,600	3,000
Growing and Feeding Field Roots, Bull. 94 F	7,800	3,000
Some Flowering Bulbs, Bull. 95	23,500	20,420
The Conversion of Dry Roughage into a Succulent Feed, Bull. 96 (French)	900	900
Crop Rotations and Soil Management for the Prairie Provinces, Bull. 98	24,838	12,800
The Soils of Prince Edward Island, Bull. 100	13,250	8,250
Poultry Breeding Records, Bull. 103	17,600	9,900
Studies in Forest Pathology, Part I, Bull. 104	7,000	6,950
Seedling Blight and Foot-roots of Oats, Bull. 105	4,700	2,250
Stem Rust in Western Canada, Bull. 106	7,700	6,040
Peas—A Guide to Seed Growers, Bull. 107	9,700	1,260
Studies in Strawberry Bud Differentiation, Bull. 110	4,700	3,595
Practical Steer Feeding on the Prairies, Cir. 26 (French)	5,000	2,000

Branch and Title	Received	Distributed
The Experimental Farms Branch—Concluded		
The Feeding of Dairy Cattle, Cir. 46 F	5,000	2,000
Goose Raising, Cir. 55	19,500	9,680
The Feeding of Swine, Cir. 61 (French)	9,975	7,475
How to Make and Use Hotbeds and Cold Frames, Cir. 63	15,450	12,425
The Washing and Sterilization of Farm Dairy Utensils, Cir. 64	28,500	27,900
The Red Currant and the White Currant (Quebec), Cir. 65	22,550	15,700
The Control of Loose Smut in Wheat, Cir. 66	5,500	4,566
Trapping Moles, Cir. 67	4,900	2,360
Natural Incubation, Cir. 70	20,000	8,850
Fall Litters—The Breeding and Management of Pigs for Winter Pork Production, Pam. 63	25,175	14,000
Breeding and Feeding the Market Hog, Pam. 74	24,800	11,220
Soybeans in Canada, Pam. 93	12,450	10,420
Marquis Wheat, Pam. 95	8,400	6,000
Nitrogen, Phosphoric Acid and Potash Starvation at Different Stages of the Growth of Fragaria, Pam. 96	4,700	3,450
Tomato Culture, Pam. 100	24,500	8,450
Root and Storage Cellars, Pam. 10. F	4,000	2,250
Canadian Certified Seed Potatoes Pam. 10 (French)	5,800	4,770
Alfalfa—Why it should be grown and how to grow it	1,000	1,000
Air Curing Tobacco	9,075	1,500
Shipping Cattle to Britain, Bul. 62	2,000	1,200
The Fruit Branch—		
Canadian Grown Apples, Bul. 35 (French)	7,100	7,100
Canning, Drying and Storing Fruit and Vegetables, Bul. 65	4,500	4,500
List of Wholesale Dealers in Fruits and Vegetables in Canada, Bul. 101	2,950	2,200
Health of Animals Branch—		
Report of the Veterinary Director General for year ending March 31, 1928	4,000	3,690
Fox Ranching in Canada, Bul. 12	3,000	2,100
The Meat and Canned Foods Act No. 15	650	650
The Live Stock Branch—		
Manitoba Approved Flocks, Pam. 25	15,250	15,250
Docking and Castration, Pam. 46	4,000	2,650
Hog Marking, Pam. 88	8,000	6,800
The Eighth Annual Live Stock Market and Meat Trade Review, 1927	2,760	2,760
The Origin and Quality of Commercial Live Stock Marketed in Canada in 1927	2,800	2,800
The Canadian Record of Performance for Pure-bred Dairy Cattle, Report No. 20	4,000	3,520
The Canadian Record of Performance for Pure-bred Poultry, 1926-27, Report No. 8	5,000	4,700
Suggestions for the Preparation of Frying or Broiling Chickens	4,000	4,000
The Grading and Marking of Dressed Poultry	3,000	2,000
The Grading and Marking of Eggs	2,000	2,000
The Seed Branch—		
Fertilizer Analyses, 1927-28, Pam. 98	840	790
The Fertilizers Act, No. 9	14,000	7,130
The Agricultural Pests Control Act, 1927	2,500	1,300
The Seed Act, No. 24	3,750	1,900
The Root Vegetables Act, No. 3	500	500
The Publications Branch—		
List of Publications, Pam. 101	38,000	30,600
Miscellaneous—		
The Artificial Brooding of Chicks	6,000	4,000
Rust Research Laboratory, Winnipeg, Man	4,900	3,790
Tobacco Inquiry Commission Report	8,100	5,800
Canadian Seed Growers' Association and its Work	4,800	4,420
	1,256,251	893,097

SUPERVISION OF RACE TRACK BETTING

With the assistance and co-operation of the Royal Canadian Mounted Police, the Department of Agriculture supervised betting on all race tracks in Canada during the year 1928.

Race meetings were held on the race tracks of thirty-two racing associations, with a total of three hundred and fifty days racing. The total wagered on all tracks was $45,960,928, while the total amount retained by associations as their legal percentage was $3,154,643.77, while $1,973,730 was paid as prize money.

The following table gives by districts Canadian race track statistics of betting for the year 1928:—

District	Number of associations	Number of days racing	Amounts wagered	Pari-Mutuel receipts retained	Prize money
			$ cts.	$ cts.	$ cts.
Quebec	6	84	7,325,487 00	533,154 09	421,500 00
Ontario	9	119	26,906,618 00	1,733,718 04	1,039,200 00
Prairie Provinces	12	91	7,214,701 00	520,865 92	315,930 00
British Columbia	5	56	4,514,122 00	326,905 72	197,100 00
Canada	32	350	45,960,928 00	3,154,643 77	1,973,730 00

Respectfully submitted,

W. R. MOTHERWELL,
Minister of Agriculture.

REPORT OF THE DEPARTMENT

OF

NATIONAL DEFENCE

CANADA

FOR THE

FISCAL YEAR ENDING MARCH 31

1929

(MILITIA AND AIR SERVICES)

250-7-29 (3051)
H.Q. 650-5-37

OTTAWA
F. A. ACLAND
PRINTER TO THE KING'S MOST EXCELLENT MAJESTY
1929

To His Excellency the Right Honourable Viscount Willingdon, G.C.S.I., G.C.M.G., G.C.I.E., G.B.E., Governor General and Commander-in-Chief of the Dominion of Canada.

MAY IT PLEASE YOUR EXCELLENCY:

The undersigned has the honour to present to Your Excellency the report of the Department of National Defence (Militia and Air Services) for the fiscal year ending March 31, 1929.

Respectfully submitted,

J. L. RALSTON,
Minister of National Defence.

DEPARTMENT OF NATIONAL DEFENCE,
OTTAWA, September 11, 1929.

OTTAWA, September 10, 1929.

The Honourable the Minister,
Department of National Defence,
Ottawa.

SIR,—I have the honour to submit for your consideration, to be laid on the Table of the House, this, the Annual Report of the Department of National Defence (Militia and Air Services), for the fiscal year 1928-29.

I have the honour to be, sir,

Your obedient servant,

G. J. DESBARATS,
Deputy Minister.

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REPORT OF THE

DEPARTMENT OF NATIONAL DEFENCE, CANADA

(Militia and Air Services)

FOR THE FISCAL YEAR ENDING MARCH 31, 1929

REPORT OF THE CHIEF OF THE GENERAL STAFF

The reports of the several directorates and branches under the Chief of the General Staff are shown in the following order:—

(a) Militia Service

(1) Military Operations and Intelligence.
(2) Military Training and Staff Duties.
(3) Armament.
(4) Operation of Wireless Systems.
(5) Physical Training and Cadet Services.
(6) Historical Section.

(b) Royal Canadian Air Force.

(1) Military Operations and Intelligence

Operations

Attention continues to be given to questions and problems in relation to defence.

Intelligence

The work of collecting, collating and disseminating military intelligence has been well maintained.

Geographical Section, General Staff

General

Major J. B. Cochrane, who has been in charge of the Survey and Geographical Section since 1914, retired to pension at the end of March, 1929, after forty-five years' employment in the Government service. His successor will be Major (Brevet Lt.-Col.) P. deL. D. Passy, R.C.E.

One control party was employed during the summer of 1928 in the province of Ontario, and topography was carried out both in Ontario and Quebec.

The Annual Course of Instruction in Surveying was held during the period January 3 to October 31, 1928. Three candidates were authorized to take the course, and two qualified as Skilled Topographical Surveyors and one was granted a fair certificate.

Up to the 31st March, 1929, the total area surveyed, for which map sheets have been published was	41,530	square miles
Area fully surveyed (map sheets not published)	1,829	"
Area controlled and photographer	887	"
Area controlled only	1,765	"
Total	46,011	"

Aerial Photography

Vertical aerial photographs for the Geographical Section were taken by the Royal Canadian Air Force, during the summer of 1928, over the following areas:—

Portions of Lindsay, Scugog, Rice Lake and Port Hope sheet areas (Ontario)	750 square miles
Valcartier Reserve area (Quebec)	90 "
Disraeli sheet area (Quebec)	400 "

Field Work

Control.—The secondary levelling of the Lindsay Sheet, which was unfinished in 1927, was completed and the Peterborough, Rice Lake, Port Hope and portions of the Campbellford and Trenton Sheets were controlled, both horizontally and vertically. The control party was in the field for the period May 1 to November 8, or for 27½ weeks. A total mileage of 608 miles of horizontal control, with 298 stations occupied, and 1,604 miles (620 miles primary level and 984 miles secondary levels) of vertical control was provided, as compared with 1,390 and 1,370 respectively in 1927. The reduction in the mileage of horizontal control is due to the fact that no secondary horizontal control was run, in anticipation of the provision of aerial photographs over the area controlled. The discontinuance of the secondary control enabled the party to cover a larger area, with the consequent increase in the miles of levels.

The Wild transit and Invar tapes were again used, the former for about half the season, when it ceased to function and was replaced by the one minute Berger instrument. The closing errors were not so good as in the preceding year, and the indicated errors between geodetic triangulation points were not as satisfactory as in 1927. These have since been accounted for by a contraction of the Invar tapes, and it is anticipated that the errors will be reduced in future by the more frequent comparison of the field tapes with the standard. Azimuth observations were made on Polaris as in 1927.

Topography.—Was carried out in four new sheets—Beaverton, Newmarket, Scugog, and Oshawa—in resurveying the remainder of the Lucan Sheet, begun in 1927, and the Valcartier Area, for the purpose of publishing a map sheet at a scale of 1/20,000. A total of 1,403 square miles of new work and 215 square miles of resurvey and revision were completed.

During the winter of 1928-29 the remainder of the detail from all aerial photos taken in 1928 was plotted in the Lindsay, Port Hope, Rice Lake, and Disraeli Sheets, 484 square miles being completed at the average of 1·66 square miles per day per man.

Office Work

Printing

(a) For Department of National Defence—	
Five new or resurveyed and redrawn 1" sheets were published, namely: Perth, Alliston, Barrie, Perch, Parkhill	3,872
One resurveyed and redrawn 2" sheet, Kingston, was published	971
One new ½" sheet, Sherbrooke, was published	1,000
Three confidential maps	1,200
Reprints of 28 maps	18,032
One hundred and thirty-two diagrams	31,078
Thirteen Pro Formas	1,866
Minature targets and score cards	311,019
Departmental cheques	236,300
Five maps for Civil Aviation Report	19,050
Two maps for Defence Quarterly	9,630
Twenty-five miscellaneous maps, proofs, etc	595
Co-ordinate cards	1,350
Grid s were overprinted on nine 1" sheets	1,988
(b) For other Government Departments—	
Fourteen sheets of the Map of London, Ont., for Geodetic Survey, printed	7,032
Thirteen sheets for the Geological Survey, printed	49,035

Photography—

Wet plate negatives, 10" x 12" to 30" x 40"	369
Photo-Litho zinc plates, 20" x 24" to 34" x 41"	310
*Dry plate negatives, 3¼ x 4¼" to 10" x 12"	125
*Photographic prints, 3¼" x 4¼" to 11" x 14"	539
Lantern slides	89
Blue and black prints (various sizes)	56
Rolls films developed	6

*Included in these figures are reproductions of 34 Regimental Badges with 337 prints.

Maps Issued—

1" and ½" Topographic map sheets sold to public		6,801
1" and ½" Topographic map sheets issued free—		
National Defence Headquarters	1,034	
Gridded maps in reserve for training	3,264	
Military Districts	6,709	
Other Federal Government departments	1,328	
Provincial Government departments	447	
Educational institutions	447	
Miscellaneous	153	
		13,382
Total issued		20,183

General Staff and Departmental Library

Volumes presented	4
Volumes purchased	172
Volumes received from the Conservation Commission Library	50
Volumes bound periodicals	90
Total (exclusive of statistics and general data received from other Branches and Departments of the Government)	316

Subscriptions to eighty-two various weekly, monthly, and quarterly periodicals and eight daily newspapers were continued. The former are circulated throughout the department, and from the latter clippings of important items are distributed to certain branches.

All the books and binding orders placed during the period under review were delivered or completed before the end of the fiscal year.

(2) Military Training and Staff Duties

REMARKS

1. With the money available in the Non Permanent Active Militia Vote, it was found possible to effect a slight increase over that of 1927-28 in the number of men to be trained and also to increase the period of training from nine to twelve days.

2. This increased period enabled progress towards efficiency to be maintained, and the policy of devoting attention generally to tactical training of units combined with instruction in the use of their weapons and the reduction of drill to a minimum resulted in increased interest throughout the Non Permanent Active Militia generally.

PERMANENT FORCE

3. Owing to the continued restricted strength of the Permanent Force it was again considered that the best results would be obtained by concentrating, as far as possible, Permanent Force units at Central Camps for Collective and Combined Training. This was carried out as under:—

Petawawa Camp—July 25 to August 25, 1928—

Royal Canadian Dragoons.
Royal Canadian Regiment.
Royal 22nd Regiment.

Sarcee Camp—August 12 to September 12, 1928—
Lord Strathcona's Horse (R.C.).
P.P.C.L.I.

4. The first three weeks were devoted to Squadron, Company, Regimental and Combined training which permitted Regimental and Battalion Commanders and leaders of smaller units to be exercised in their rôle as leaders.

5. Combined training for Cavalry and Infantry was carried out during the last week and brought forth beneficial results.

6. In the case of units other than those above mentioned, training was carried out locally under arrangements made by District Officers Commanding.

NON-PERMANENT ACTIVE MILITIA

1. Training was divided generally into unit training at local headquarters or in camp, and individual training at schools and courses of instruction.

2. Detachments of Mobile Artillery amounting to about 35 per cent of its Peace Establishment were authorized to carry out four days' training at local headquarters and eight days at practice camps. During the latter period preliminary training dismounted, battery tactics and gun practice was carried out. Heavy Artillery (Coast Defence units) trained for eight days at local headquarters and four days training in gun practice at the forts.

3. In some cases camp schools not exceeding sixteen days' duration were held in lieu of unit training, the attendance being restricted to officers, warrant officers, non-commissioned officers and specialists, and a few other ranks.

4. The following tables show the training completed by units of the Non-Permanent Active Militia:—

MILITARY DISTRICT No. 1

Unit	Numbers Trained								
	At Local Headquarters			At Camps			Total Trained		
	Officers	Other Ranks	Men Days	Officers	Other Ranks	Men Days	Officers	Other Ranks	Men Days
H.Q. 8th Mounted Brigade	.....	.....	.....	2	.....	6	2	.....	6
1st Hussars	.....	.....	.....	18	80	1,206	18	80	1,206
H.Q. 7th Field Brigade, C.A.	2	.....	8	2	1	27	2	1	35
12th Field Battery, C.A.	5	34	156	5	34	351	5	34	507
55th Field Battery, C.A.	5	42	188	5	34	351	5	42	539
H.Q. 11th Field Brigade, C.A.	2	1	12	2	1	27	2	1	39
16th Field Battery, C.A.	4	34	143	4	34	342	4	34	485
29th Field Battery, C.A.	3	29	128	4	34	341	4	34	469
H.Q. 1st Divisional Engineers	10	49	608	.....	.....	.....	10	49	608
H.Q. 1st Signal Battalion, C.C. of S.	19	129	1,755	.....	.....	.....	19	129	1,755
University of Western Ontario, C.O.T.C.	15	128	1,539	.....	.....	.....	15	128	1,539
Ontario Agricultural College, C.O.T.C.	3	21	279	.....	.....	.....	3	21	279
H.Q. 1st Infantry Brigade	.....	.....	.....	3	.....	12	3	.....	12
Middlesex Light Infantry	.....	.....	.....	21	113	1,592	21	113	1,592
The Perth Regiment	21	201	2,492	.....	.....	.....	21	201	2,492
The Huron Regiment	.....	.....	.....	19	117	1,642	19	117	1,642
The Canadian Fusiliers (City of London Regt.)	36	234	2,823	.....	.....	.....	36	234	2,823
The Bruce Regiment	.....	.....	.....	21	122	1,704	21	122	1,704
The Oxford Rifles	19	151	1,799	.....	.....	.....	19	151	1,799
The H.L.I. of Canada	28	223	2,174	17	115	529	28	223	2,703
The Wellington Rifles	.....	.....	.....	16	95	1,342	16	95	1,342
The North Waterloo Regiment (Scots' Fusiliers)	27	159	2,104	.....	.....	.....	27	159	2,104
H.Q. 3rd Infantry Brigade	.....	.....	.....	2	.....	8	2	.....	8
The Elgin Regiment	31	176	2,002	.....	.....	.....	31	176	2,002
The Lambton Regiment	16	144	1,915	4	23	321	16	144	2,236
The Essex Scottish	33	287	3,594	24	198	444	33	287	4,038
The Kent Regiment	27	178	1,719	7	39	184	27	178	1,903
2nd Battalion, C.M.G.C.	.....	.....	.....	23	104	1,514	23	104	1,514
1st Divisional Train, C.A.S.C.	2	28	332	1	10	132	2	28	464
No. 11 Field Ambulance	7	24	302	.....	2	19	7	24	321
No. 15 Field Ambulance	4	24	286	.....	2	24	4	24	310
Totals	319	2,296	26,358	200	1,158	12,118	445	2,933	38,476

MILITARY DISTRICT No. 2

Unit	Numbers Trained								
	At Local Headquarters			At Camps			Total Trained		
	Officers	Other Ranks	Men Days	Officers	Other Ranks	Men Days	Officers	Other Ranks	Men Days
H.Q. 1st Mounted Brigade				3	2	55	3	2	55
Governor General's Body Guard	10	90	1,166	13	110	1,464	23	200	2,630
2nd Dragoons	8	43	451	11	90	1,212	19	133	1,663
The Mississauga Horse	8	51	670	17	102	1,419	25	153	2,089
10th Brant Dragoons	10	43	630	8	91	1,179	18	134	1,809
H.Q. 3rd Field Brigade, C.A.	2	1	12	1	1	17	2	1	29
9th (Toronto) Field Battery, C.A.	4	34	152	5	31	306	5	34	458
15th Field Battery, C.A.	5	34	156	5	34	332	5	34	488
30th Field Battery, C.A.	5	58	252	5	34	331	5	58	583
53rd Field Battery, C.A.	5	40	180	5	34	327	5	40	507
H.Q. 8th Field Brigade, C.A.	2	1	12	2	1	27	2	1	39
10th (St. Catharines) Field Battery, C.A.	5	40	180	5	34	350	5	40	530
11th (Hamilton) Field Battery, C.A.	5	46	204	5	34	351	5	46	555
40th Field Battery, C.A.	5	31	144	5	33	342	5	33	486
54th Field Battery, C.A.	8	43	204	4	30	316	8	43	520
2nd Divisional Engineers, C.E.	12	48	644				12	48	644
2nd Signal Battalion, C.C. of S.	28	93	1,547				28	93	1,547
No. 2 Cyclist Company, Corps of Guides	5	35	437				5	35	437
Toronto University Contingent, C.O.T.C.	27	284	3,732				27	284	3,732
H.Q. 4th Infantry Brigade	2		24				2		24
The Royal Hamilton Light Infantry	29	225	3,024				29	225	3,024
The Dufferin Rifles of Canada	28	186	2,157				28	186	2,157
The Wentworth Regiment	20	136	1,527	17	83	300	20	136	1,827
The Argyll and Sutherland Highlanders of Canada (Princess Louise)	34	272	3,648				34	272	3,648
H.Q. 5th Infantry Brigade				3	2	70	3	2	70
The Lincoln Regiment	28	107	1,608				28	107	1,608
The Haldimand Rifles				16	115	1,309	16	115	1,309
The Norfolk Rifles	21	121	1,266	1	27	336	21	121	1,602
The Lincoln and Welland Regiment				17	135	1,546	17	135	1,546
H.Q. 6th Infantry Brigade	2		24				2		24
The Queen's Own Rifles of Canada	64	395	5,214				64	395	5,214
The Royal Grenadiers	31	226	3,060				31	226	3,060
The 48th Regiment (Highlanders)	32	443	5,639				32	443	5,639
H.Q. 14th Infantry Brigade	2		24				2		24
The Irish Regiment	19	54	865				19	54	865
The Toronto Regiment	33	182	2,348				33	182	2,348
The Toronto Scottish Regiment	32	272	3,636				32	272	3,636
The Queen's Rangers	31	185	2,388				31	185	2,388
H.Q. 22nd Infantry Brigade				3	3	77	3	3	77
The Grey Regiment				18	107	1,492	18	107	1,492
The Simcoe Foresters				21	118	1,672	21	118	1,672
The Northern Pioneers				12	66	920	12	66	920
The Algonquin Rifles				10	104	1,463	10	104	1,463
H.Q. 25th Infantry Brigade	3		15	3	3	30	3	3	45
The York Rangers	22	161	1,749	20	91	444	22	161	2,193
The Peel and Dufferin Regiment	29	150	1,242	27	112	697	29	150	1,939
The Halton Rifles	5	36	460	14	62	897	19	83	1,357
The Ontario Regiment	21	143	1,271	18	110	513	21	143	1,784
The Sault Ste. Marie Regiment	19	90	1,037				19	90	1,037
1st Battalion, C.M.G.C.	32	97	1,214	18	72	270	32	97	1,484
3rd Battalion, C.M.G.C.	25	144	2,006				25	144	2,006
2nd Divisional Train, C.A.S.C.	19	45	768				19	45	768
8th Divisional Train, C.A.S.C.	17	29	547	1	14	225	17	29	772
No. 2 Field Ambulance	5	4	95	5	21	306	9	25	401
No. 5 Field Ambulance	8		64	4	30	386	8	30	450
No. 7 Cavalry Field Ambulance	4	3	63	4	21	298	6	24	361
No. 16 Field Ambulance	2	9	111	4	23	304	6	29	415
No. 19 Field Ambulance				7	22	322	7	22	322
No. 2 Casualty Clearing Station				5	28	489	5	28	489
No. 2 Detachment, C.A.D.C.				2	1	24	2	1	24
No. 2 Detachment, C.P.C.					1	13		1	13
Totals	773	4,730	57,867	344	2,032	22,431	964	5,971	80,298

MILITARY DISTRICT No. 3

Unit	Numbers Trained								
	At Local Headquarters			At Camps			Total Trained		
	Officers	Other Ranks	Men Days	Officers	Other Ranks	Men Days	Officers	Other Ranks	Men Days
H.Q. 2nd Mounted Brigade	.....	.....	.....	2	2	48	2	2	48
Princess Louise Dragoon Guards	.....	.....	.....	19	119	1,670	19	119	1,670
3rd Prince of Wales Canadian Dragoons	.....	.....	.....	14	112	1,524	14	112	1,524
4th Hussars	.....	.....	.....	11	92	1,234	11	92	1,234
H.Q. 1st Field Brigade, C.A.	1	.....	4	1	.....	8	1	.....	12
1st Field Battery, C.A.	5	34	156	4	31	356	5	34	512
2nd (Ottawa) Field Battery, C.A.	5	31	144	4	27	248	5	31	392
51st Field Battery, C.A.	5	35	160	5	33	304	5	35	464
H.Q. 4th Field Brigade, C.A.	1	1	8	1	1	18	1	1	20
4th Field Battery, C.A.	.....	.....	.....	3	31	306	3	31	306
14th Field Battery, C.A.	4	33	142	.....	.....	.....	4	33	142
22nd Medium Battery	5	33	152	5	34	344	5	34	496
H.Q. 9th Field Brigade	.....	1	4	1	1	13	1	1	17
3rd (Gananoque) Field Battery, C.A.	4	33	129	4	32	324	4	33	453
32nd (Kingston) Field Battery, C.A.	6	31	148	4	34	297	6	34	445
34th Field Battery, C.A.	4	35	129	4	32	321	4	35	450
H.Q. 3rd Divisional Engineers	7	57	459	.....	.....	.....	7	57	459
3rd Signal Battalion, C. C. of S.	.....	.....	.....	22	137	2,033	22	137	2,033
Queens University Contingent, C.O.T.C.	26	75	1,007	.....	.....	.....	26	75	1,007
The Princess of Wales Own Regiment	20	149	1,387	.....	.....	.....	20	149	1,387
The Argyll Light Infantry	22	161	1,624	.....	.....	.....	22	161	1,624
Hastings and Prince Edward Regiment	.....	.....	.....	21	112	1,590	21	112	1,590
The Frontenac Regiment	.....	.....	.....	22	100	1,431	22	100	1,431
The Lanark and Renfrew Scottish Regiment	.....	.....	.....	20	129	1,742	20	129	1,742
H.Q. 8th Infantry Brigade	.....	.....	.....	2	1	27	2	1	37
The Brockville Rifles	25	201	1,595	20	128	450	25	201	2,045
The Grenville Regiment (Lisgar Rifles)	.....	.....	.....	10	42	526	10	42	526
The Stormont, Dundas and Glengarry Highlanders	.....	.....	.....	21	123	1,663	21	123	1,663
The Ottawa Highlanders	24	269	2,752	.....	.....	.....	24	269	2,752
Le Regiment de Hull	20	194	1,926	.....	.....	.....	20	194	1,926
H.Q. 9th Infantry Brigade	1	.....	1	2	1	37	2	1	38
The Northumberland Regiment	.....	.....	.....	12	82	1,127	12	82	1,127
The Victoria and Haliburton Regiment	21	158	707	12	73	264	21	158	971
The Durham Regiment	.....	.....	.....	17	88	1,221	17	88	1,221
The Peterborough Rangers	24	145	1,455	.....	.....	.....	24	145	1,455
The Governor General's Foot Guards	33	260	2,736	.....	.....	.....	33	260	2,736
4th Battalion, C.M.G.C.	8	55	626	17	107	1,029	17	107	1,655
3rd Divisional Train, C.A.S.C.	.....	.....	.....	13	45	641	13	45	641
No. 1 Field Ambulance	.....	.....	.....	4	30	410	4	30	410
No. 23 Field Ambulance	.....	.....	.....	4	24	325	4	24	325
No. 3 Detachment, C.O.C.	.....	.....	.....	1	6	84	1	6	84
Totals	271	1,991	17,451	302	1,809	21,625	498	3,322	39,076

MILITARY DISTRICT No. 4

Unit	Numbers Trained								
	At Local Headquarters			At Camps			Total Trained		
	Officers	Other Ranks	Men Days	Officers	Other Ranks	Men Days	Officers	Other Ranks	Men Days
H.Q. 3rd Mounted Brigade	.....	.....	.....	1	.....	1	1	.....	1
17th Duke of York's Royal Canadian Hussars	.....	.....	.....	11	104	1,377	11	104	1,377
The Eastern Townships Mounted Rifles	.....	.....	.....	15	93	1,371	15	93	1,371
24th (Shefford) Field Battery, C.A.	4	31	120	4	29	297	4	31	417
35th Field Battery, C.A. (Howitzer)	4	32	131	2	33	315	4	33	446
81st Field Battery, C.A.	2	34	217	.....	.....	.....	2	34	217
H.Q. 2nd Field Brigade, C.A.	2	1	12	.....	.....	.....	2	1	12
5th (Westmount) Field Battery, C.A.	5	40	180	5	34	351	5	40	531
7th (Montreal) Field Battery, C.A.	5	34	156	4	33	306	5	34	462
27th Field Battery, C.A. (How.)	4	32	144	1	27	252	4	32	396
66th Field Battery, C.A. (How.)	5	37	168	3	29	287	5	37	455
H.Q. 2nd Medium Brigade, C.A.	3	1	16	1	1	18	3	1	34
1st Medium Battery, C.A.	6	39	180	5	34	351	6	39	531
3rd Medium Battery, C.A. (How.)	6	39	180	5	34	351	6	39	531
7th Medium Battery, C.A. (How.)	5	40	180	5	34	351	5	40	531
10th Medium Battery, C.A. (How.)	5	40	180	5	34	351	5	40	531
2nd Montreal Regiment, C.A.	2	.....	8	1	.....	4	2	.....	12
4th Divisional Engineers	10	90	1,200	.....	.....	.....	10	90	1,200
No. 4 Signal Company	10	73	965	.....	.....	.....	10	73	965
3rd Signal Troop, C.C.S.	1	14	155	.....	.....	.....	1	14	155
McGill University, C.O.T.C.	15	83	1,176	.....	.....	.....	15	83	1,176
Loyola College, C.O.T.C.	6	110	1,392	.....	.....	.....	6	110	1,392
University of Bishops College, C.O.T.C.	4	60	768	.....	.....	.....	4	60	768
L'Universite de Montreal, C.O.T.C.	8	102	1,320	.....	.....	.....	8	102	1,320
The Sherbrooke Regiment	22	173	2,243	.....	.....	.....	22	173	2,243
Les Carabiniers de Sherbrooke	33	219	2,551	.....	.....	.....	33	219	2,551
Le Regiment de St. Hyacinthe	24	143	2,088	.....	.....	.....	24	143	2,088
Le Regiment de Chateauguay	.....	.....	.....	20	139	1,929	20	139	1,929
Les Carabiniers Mont Royal	29	358	4,644	.....	.....	.....	29	358	4,644
Le Regiment de Joliette	.....	.....	.....	25	151	2,126	25	151	2,126
The Three Rivers Regiment	22	129	1,534	.....	.....	.....	22	129	1,534
Le Regiment de Maisonneuve	34	370	4,842	.....	.....	.....	34	370	4,842
H.Q. 12th Infantry Brigade	.....	.....	.....	1	.....	3	1	.....	3
The Victoria Rifles of Canada	31	337	3,836	21	84	408	31	337	4,244
The Royal Highlanders of Canada	64	741	8,463	35	205	957	64	741	9,420
The Royal Montreal Regiment	29	223	2,621	15	87	403	29	223	3,024
The Canadian Grenadier Guards	34	360	4,715	.....	.....	.....	34	360	4,715
1st Motor Machine Gun Brigade	19	81	1,020	7	27	174	19	81	1,194
8th Battalion, C.M.G.C.	9	48	615	5	27	69	9	48	684
4th Divisional Train, C.A.S.C.	19	66	988	5	33	428	19	66	1,416
No. 6 Field Ambulance	4	20	288	.....	.....	.....	4	20	288
No. 9 Field Ambulance	5	22	324	.....	.....	.....	5	22	324
No. 4 Cyclist Company, Corps of Guides	6	24	360	.....	.....	.....	6	24	360
Totals	496	4,246	49,980	202	1,272	12,480	569	4,734	62,460

MILITARY DISTRICT No. 5

Unit	Numbers Trained								
	At Local Headquarters			At Camps			Total Trained		
	Officers	Other Ranks	Men Days	Officers	Other Ranks	Men Days	Officers	Other Ranks	Men Days
H.Q. 4th Mounted Brigade	.....	.....	.....	4	1	64	4	1	64
7th Hussars	.....	.....	.....	18	106	1,570	18	106	1,570
11th Hussars	.....	.....	.....	14	105	1,595	14	105	1,595
H.Q. 13th Field Brigade, C.A.	2	.....	8	.....	.....	.....	2	.....	8
57th (Quebec) Field Battery, C.A.	5	45	200	5	34	351	5	45	551
H.Q. 6th (Quebec and Levis) Coast Brigade, C.A.	4	2	24	4	2	60	4	2	84
57th Heavy Battery, C.A.	5	48	192	4	35	390	5	48	582
58th Heavy Battery, C.A.	5	48	180	4	36	400	5	48	580
59th Heavy Battery, C.A.	5	42	173	4	36	400	5	42	573
5th Divisional Engineers	7	46	583	.....	.....	.....	7	46	583
H.Q. 5th Signal Battalion, C.C. of S.	25	134	1,949	.....	.....	.....	25	134	1,950
Laval University, C.O.T.C.	7	34	421	.....	.....	.....	7	34	421
H.Q. 13th Infantry Brigade	.....	.....	.....	2	2	48	2	2	48
Le Regiment de Montmagny	.....	.....	.....	9	101	1,340	9	101	1,340
Le Regiment de Beauce	.....	.....	.....	15	105	1,448	15	105	1,448
Fusiliers du St. Laurent	.....	.....	.....	27	215	2,530	27	215	2,530
Le Regiment de Levis	23	147	1,471	20	133	476	23	147	1,947
H.Q. 15th Infantry Brigade	.....	.....	.....	1	.....	3	1	.....	3
The Royal Rifles of Canada	25	144	1,480	16	91	337	25	144	1,817
Les Voltigeurs de Quebec	33	213	2,254	32	170	625	33	213	2,879
Le Regiment de Quebec	33	150	1,530	23	93	364	33	150	1,894
Les Chasseurs Canadiens	.....	.....	.....	18	129	1,780	18	129	1,780
5th Divisional Train, C.A.S.C.	.....	.....	.....	11	39	612	11	39	612
No. 25 Field Ambulance	5	22	308	.....	.....	.....	5	22	308
No. 30 Field Ambulance	4	22	300	.....	.....	.....	4	22	300
No. 5 Section, C.A.V.C.	.....	.....	.....	.....	9	112	.....	9	112
Totals	183	1,097	11,074	230	1,442	14,505	307	1,909	25,579

MILITARY DISTRICT No. 6

Unit	Numbers Trained								
	At Local Headquarters			At Camps			Total Trained		
	Officers	Other Ranks	Men Days	Officers	Other Ranks	Men Days	Officers	Other Ranks	Men Days
Kings Canadian Hussars				17	75	1,115	17	75	1,115
The P.E.I. Light Horse				19	64	1,124	19	64	1,124
H.Q. 14th Field Brigade, C.A.	2		4	2		24	2		28
52nd Field Battery, C.A.	4	34	152	4	34	437	4	34	589
84th Field Battery, C.A. (How.)	4	34	152	4	32	432	4	34	584
87th Field Battery, C.A.	5	34	156	5	34	468	5	34	624
H.Q. 16th Field Brigade, C.A.	2	1	12	2	1	32	2	1	44
6th (Sydney) Field Battery, C.A.	4	34	152	3	34	444	4	34	596
36th Field Battery, C.A. (How.)	4	34	152	3	34	441	4	34	593
83rd Field Battery, C.A.	4	32	144	4	34	437	4	34	581
86th Field Battery, C.A.	4	33	148	5	33	456	5	33	604
H.Q. 1st P.E.I. Medium Brigade	1	1	8				1	1	8
2nd Medium Battery, C.A. (How.)	4	34	152	3	34	437	4	34	589
8th Medium Battery, C.A. (How.)	5	34	156	5	34	449	5	34	605
1st Halifax Coast Brigade, C.A.	18	123	1,153	18	97	546	18	133	1,699
9th Heavy Battery, C.A. (How.)	5	34	156	5	34	466	5	34	622
10th Fortress Company	5	43	472				5	43	472
6th Signal Battalion, C.C. of S.				10	84	1,250	10	84	1,250
Nova Scotia Technical College, C.O.T.C.	3	47	600				3	47	600
Dalhousie University, C.O.T.C.	5	73	468				5	73	468
H.Q. 17th Infantry Brigade				2	1	39	2	1	39
The Lunenburg Regiment				13	108	1,437	13	108	1,437
The Annapolis Regiment				18	115	1,602	18	115	1,602
The Colchester and Hants Regiment				13	95	1,303	13	95	1,303
The Halifax Rifles	22	108	820	8	62	254	22	108	1,074
The Princess Louise Fusiliers	12	109	903	6	52	231	12	109	1,134
H.Q. 18th Infantry Brigade				2	2	50	2	2	50
The Pictou Highlanders				18	94	1,570	18	94	1,570
The Cumberland Highlanders				9	103	1,343	9	103	1,343
The Cape Breton Highlanders				13	98	1,335	13	98	1,335
The P.E.I. Highlanders				21	103	1,471	21	103	1,471
6th Battalion, C.M.G.C.				19	80	1,171	19	80	1,171
No. 26 Field Ambulance				5	30	428	5	30	428
No. 22 Field Ambulance				4	25	351	4	25	351
No. 6 Detachment, C.P.C.					1	15		1	15
Totals	113	852	5,960	260	1,627	21,158	297	1,932	27,118

MILITARY DISTRICT No. 7

Unit	Numbers Trained								
	At Local Headquarters			At Camps			Total Trained		
	Officers	Other Ranks	Men Days	Officers	Other Ranks	Men Days	Officers	Other Ranks	Men Days
H.Q. 9th Mounted Brigade				3	3	72	3	3	72
8th Princess Louise's N.B. Hussars				20	78	1,189	20	78	1,189
The N.B. Dragoons				14	89	1,246	14	89	1,246
H.Q. 12th Field Brigade, C.A.	2	1	12	2	1	33	2	1	45
8th Field Battery, C.A.	4	34	152	5	34	429	5	34	581
28th (Newcastle) Field Battery, C.A.	5	34	156	5	34	429	5	34	585
89th (Woodstock) Field Battery, C.A.	5	34	156	5	34	429	5	34	585
90th Field Battery, C.A. (How.)	3	34	148	4	34	418	4	34	566
H.Q. 3rd N.B. Medium Brigade, C.A.	3		12	1	1	22	3	1	34
4th Medium Battery, C.A. (How.)	6	34	160	3	34	407	6	34	567
6th Medium Battery, C.A. (How.)	5	36	164	5	34	429	5	36	593
15th Medium Battery, C.A.	6	34	144	4	34	418	6	34	562
6th Divisional Engineers				1	4	70	1	4	70
6th Signal Battalion, C.C. of S.				6	51	740	6	51	740
University of New Brunswick Contingent, C.O.T.C.	10	125	1,567				10	125	1,567
H.Q. 16th Infantry Brigade				2	1	36	2	1	36
The Carleton Light Infantry				17	90	1,254	17	90	1,254
The York Regiment				22	115	1,629	22	115	1,629
The North Shore (N.B.) Regiment				23	92	1,392	23	92	1,392
The New Brunswick Rangers				22	96	1,443	22	96	1,443
The St. John Fusiliers	28	108	1,396		5	60	28	108	1,456
7th Battalion, C.M.G.C.				23	101	1,456	23	101	1,456
7th Divisional Train, C.A.S.C.				6	28	441	6	28	441
No. 14 Field Ambulance				7	21	323	7	21	323
No. 7 Cyclist Company, Corps of Guides				4	4	89	4	4	89
Totals	77	474	4,067	204	1,018	14,446	249	1,254	18,513

MILITARY DISTRICT No. 10

Unit	Numbers Trained								
	At Local Headquarters			At Camps			Total Trained		
	Officers	Other Ranks	Men Days	Officers	Other Ranks	Men Days	Officers	Other Ranks	Men Days
H.Q. 6th Mounted Brigade	.....	.....	.....	2	3	63	2	3	63
The Fort Garry Horse	.....	.....	.....	11	139	1,806	11	139	1,806
The Manitoba Horse	.....	.....	.....	16	126	1,697	16	126	1,697
12th Manitoba Dragoons	.....	.....	.....	7	113	1,385	7	113	1,385
The Manitoba Mounted Rifles	.....	.....	.....	11	122	1,608	11	122	1,608
The Border Horse	.....	.....	.....	7	64	851	7	64	851
H.Q. 5th Field Brigade, C.A.	3	19	88	1	1	16	3	19	104
13th (Winnipeg) Field Battery, C.A.	5	34	156	5	28	260	5	34	416
17th Field Battery, C.A.	5	11	64	4	32	283	5	32	347
19th Field Battery, C.A.	5	28	132	5	33	304	5	33	436
38th Field Battery, C.A. (How.)	5	25	120	3	22	200	5	25	320
59th Field Battery, C.A.	3	12	55	.....	.....	.....	3	12	55
12th Field Company, C.E.	2	19	252	.....	.....	.....	2	19	252
H.Q. 10th Signal Battalion, C.C. of S.	10	17	306	.....	.....	.....	10	17	306
No. 10 Signal Company	.....	.....	.....	4	34	497	4	34	497
No. 17 Signal Company	6	44	600	.....	.....	.....	6	44	600
Manitoba University, C.O.T.C.	25	218	2,655	.....	.....	.....	25	218	2,655
H.Q. 20th Infantry Brigade	1	1	24	.....	.....	.....	1	1	24
The Winnipeg Rifles	25	201	2,712	.....	.....	.....	25	201	2,712
The Winnipeg Grenadiers	22	225	2,390	.....	.....	.....	22	225	2,390
The Queen's Own Cameron Highlanders of Canada	19	213	2,784	.....	.....	.....	19	213	2,784
The Winnipeg Light Infantry	21	259	2,593	.....	.....	.....	21	259	2,593
The Lake Superior Regiment	23	117	1,680	.....	.....	.....	32	117	1,680
The Kenora Light Infantry	9	118	1,177	.....	.....	.....	9	118	1,177
The Manitoba Rangers	19	147	1,934	.....	.....	.....	19	147	1,934
1st Cavalry Machine Gun Squadron	4	66	682	.....	.....	.....	4	66	682
10th Battalion, C.M.G.C.	21	122	1,606	.....	.....	.....	21	122	1,606
No. 3 Field Ambulance	7	30	444	.....	.....	.....	7	30	444
No. 4 Field Ambulance	6	31	444	.....	5	70	6	31	514
No. 21 Cavalry Field Ambulance	.....	.....	.....	1	1	24	1	1	24
No. 10 Section, C.A.V.C.	.....	.....	.....	.....	6	72	.....	6	72
Totals	246	1,957	22,898	77	729	9,136	305	2,591	32,034

MILITARY DISTRICT No. 11

Unit	Numbers Trained								
	At Local Headquarters			At Camps			Total Trained		
	Officers	Other Ranks	Men Days	Officers	Other Ranks	Men Days	Officers	Other Ranks	Men Days
5th British Columbia Light Horse	.....	.....	.....	16	106	1,557	16	106	1,557
The British Columbia Mounted Rifles	.....	.....	.....	13	117	1,516	13	117	1,516
H.Q. 15th Field Brigade, C.A.	3	1	16	.....	1	11	3	1	27
31st Field Battery, C.A.	5	39	176	4	34	399	5	39	575
68th Field Battery, C.A.	5	38	172	5	34	406	5	38	578
85th Field Battery, C.A. (How.)	5	39	176	5	32	370	5	39	546
5th Medium Battery, C.A.	5	40	178	5	34	408	5	40	586
H.Q. 5th (B.C.) Coast Brigade, C.A.	4	3	48	3	2	24	4	3	72
55th Heavy Battery, C.A.	4	40	336	4	35	198	4	40	534
56th Heavy Battery, C.A.	4	41	348	4	37	210	4	41	558
2nd Anti-Aircraft Section	3	10	104	3	10	66	3	10	170
58th Field Battery, C.A.	2	41	172	3	34	370	2	41	542
12th Heavy Battery (How.)	2	9	44	2	34	360	2	34	404
11th District Engineers	8	9	297	.....	.....	.....	8	9	297
21st Signal Company	5	11	199	.....	.....	.....	5	11	199
11th Fortress Signal Company	1	24	175	1	24	150	1	24	325
University of British Columbia, C.O.T.C.	5	110	1,071	.....	.....	.....	5	110	1,071
H.Q. 23rd Infantry Brigade	2	4	48	2	4	24	2	4	72
1st British Columbia Regiment	21	122	1,227	16	82	392	21	122	1,619
The Vancouver Regiment	16	129	1,503	13	66	255	16	129	1,758
The Westminster Regiment	19	102	1,103	15	79	481	19	102	1,584
The Seaforth Highlanders of Canada	2.	152	1,.87	23	151	730	23	152	2,117
The Irish Fusiliers of Canada	15	108	1,152	11	62	293	15	108	1,445
The Canadian Scottish Regiment	35	125	1,395	30	139	506	35	139	1,901
The Rocky Mountain Rangers	.....	.....	.....	7	31	532	7	31	532
11th Battalion, C.M.G.C.	20	108	1,282	9	52	183	20	108	1,465
11th Divisional Train, C.A.S.C.	11	42	489	6	21	106	11	42	595
No. 18 Field Ambulance	6	22	228	6	13	76	6	22	304
Totals	229	1,369	13,326	206	1,234	9,623	265	1,662	22,949

MILITARY DISTRICT No. 12

Unit	Numbers Trained								
	At Local Headquarters			At Camps			Total Trained		
	Officers	Other Ranks	Men Days	Officers	Other Ranks	Men Days	Officers	Other Ranks	Men Days
14th Canadian Light Horse	.....	.....	.....	12	90	1,841	12	90	1,841
16th Canadian Light Horse	.....	.....	.....	18	105	1,494	18	105	1,494
18th Canadian Light Horse	.....	.....	.....	13	93	1,246	13	93	1,246
The Saskatchewan Mounted Rifles	.....	.....	.....	13	82	1,181	13	82	1,181
18th Field Battery, C.A.	3	16	210	.....	.....	.....	3	16	210
60th Field Battery, C.A.	.....	.....	.....	2	.....	28	2	.....	28
77th Field Battery, C.A.	3	33	432	.....	.....	.....	3	33	432
H.Q. 17th Field Brigade, C.A.	2	–	8	1	–	4	2	–	12
21st Field Battery, C.A. (How.)	5	39	176	4	28	280	5	39	456
44th Field Battery, C.A.	5	33	152	3	24	241	5	33	393
12th District Engineers	2	19	248	4	25	337	4	25	585
12th Signal Battalion, C. C. of S.	12	38	650	7	94	1,319	12	94	1,969
Saskatchewan University, C.O.T.C.	18	136	1,848	1	7	94	18	136	1,942
H.Q. 19th Infantry Brigade	.....	.....	.....	1	.....	12	1	.....	12
The Kings Own Rifles of Canada	21	74	1,109	.....	.....	.....	21	74	1,109
The Regina Rifle Regiment	18	181	2,127	.....	.....	.....	18	181	2,127
The Weyburn Regiment	.....	.....	.....	18	127	1,752	18	127	1,752
The Assiniboia Regiment	.....	.....	.....	10	94	1,271	10	94	1,271
The Saskatchewan Border Regiment	.....	.....	.....	17	63	963	17	63	963
The Saskatoon Light Infantry	13	129	2,034	.....	.....	.....	17	129	2,034
The Prince Albert Volunteers	.....	.....	.....	15	131	1,760	15	131	1,760
The Yorkton Regiment	.....	.....	.....	17	130	1,775	17	130	1,775
The Battleford Light Infantry	.....	.....	.....	13	118	1,519	13	118	1,519
12th Battalion, C.M.G.C.	12	52	675	3	27	352	14	79	1,027
12th Divisional Train, C.A.S.C.	6	5	82	1	17	209	6	17	291
No. 10 Field Ambulance	5	24	339	.....	.....	.....	5	24	339
No. 32 Field Ambulance	4	13	125	.....	.....	.....	4	13	125
Totals	129	792	10,215	173	1,255	17,678	282	1,926	27,893

MILITARY DISTRICT No. 13

Unit	Numbers Trained								
	At Local Headquarters			At Camps			Total Trained		
	Officers	Other Ranks	Men Days	Officers	Other Ranks	Men Days	Officers	Other Ranks	Men Days
H.Q. 5th Mounted Rifles	.....	.....	.....	4	2	72	4	2	72
15th Canadian Light Horse	.....	.....	.....	16	134	1,808	16	134	1,808
19th Alberta Dragoons	.....	.....	.....	13	132	1,752	13	132	1,752
The 2nd Alberta Mounted Rifles	.....	.....	.....	12	113	1,533	12	113	1,533
H.Q. 18th Field Brigade, C.A.	1	1	8	.....	.....	.....	1	1	8
20th Field Battery, C.A.	5	36	164	5	34	312	5	36	476
93rd Field Battery, C.A. (How.)	1	13	56	1	11	93	1	13	149
H.Q. 19th Field Brigade, C.A.	1	.....	4	1	.....	8	1	.....	12
22nd Field Battery, C.A.	5	34	156	4	34	304	5	34	460
23rd Field Battery, C.A. (How.)	3	34	148	5	34	309	5	34	457
H.Q. 20th Field Brigade, C.A.	2	1	12	2	1	24	2	1	36
61st Field Battery, C.A.	5	34	156	5	33	304	5	34	460
78th Field Battery, C.A.	5	34	156	5	34	311	5	34	467
92nd Field Battery, C.A. (How.)	4	35	156	4	35	312	4	35	468
13th District Engineers	8	35	392	5	20	125	9	44	517
13th Signal Battalion, C.C. of S.	16	56	665	4	38	215	16	59	880
Alberta University, C.O.T.C.	22	264	3,348	.....	.....	.....	22	264	3,348
H.Q. 24th Infantry Brigade	2	.....	18	2	.....	6	2	.....	24
The Calgary Highlanders	22	92	918	15	48	201	22	92	1,119
The Calgary Regiment	26	136	1,448	13	56	219	26	136	1,667
The South Alberta Regiment	14	62	546	5	56	482	14	62	1,028
H.Q. 29th Infantry Brigade	1	.....	4	2	.....	17	2	.....	21
The Edmonton Regiment	22	131	612	20	88	870	22	131	1,482
The Edmonton Fusiliers	14	101	460	13	112	1,068	14	112	1,528
The North Alberta Regiment	.....	.....	.....	2	24	253	2	24	253
13th Battalion, C.M.G.C.	18	67	918	.....	.....	.....	18	67	918
13th Divisional Train, C.A.S.C.	6	15	150	.....	.....	.....	6	15	150
No. 8 Field Ambulance	5	40	284	.....	.....	.....	5	40	284
No. 17 Cavalry Field Ambulance	3	22	248	.....	.....	.....	3	22	248
Totals	211	1,243	11,027	158	1,039	10,598	262	1,671	21,625

NON-PERMANENT ACTIVE MILITIA TRAINING, 1928-29—RECAPITULATION

Military District No.	Numbers Trained								
	At Local Headquarters			At Camps (exclusive of District Camp Schools)			Total Trained		
	Officers	Other Ranks	Men Days	Officers	Other Ranks	Men Days	Officers	Other Ranks	Men Days
1	319	2,296	26,358	200	1,158	12,118	445	2,933	38,476
2	773	4,730	57,867	344	2,032	22,431	954	5,971	80,298
3	271	1,991	17,451	302	1,809	21,625	498	3,322	39,076
4	496	4,246	49,980	202	1,272	12,480	569	4,734	62,460
5	183	1,097	11,074	230	1,442	14,505	307	1,909	25,579
6	113	852	5,960	260	1,627	21,158	297	1,932	27,118
7	77	474	4,067	204	1,018	14,446	249	1,254	18,513
10	246	1,957	22,898	77	729	9,136	305	2,591	32,034
11	229	1,369	13,326	206	1,234	9,623	265	1,662	22,949
12	129	792	10,215	173	1,255	17,678	282	1,926	27,893
13	211	1,243	11,027	158	1,039	10,598	262	1,671	21,625
Totals	3,047	21,047	230,223	2,356	14,615	165,798	4,443	29,905	396,021

SCHOOLS OF INSTRUCTION

Remarks

The program for Schools of Instruction was based on that which obtained in 1927-28. There was a decrease in the number of officers attending Royal Schools for qualification for rank and a corresponding increase in the number qualifying via the Provisional School-Camp School method.

The assistance rendered by Permanent Force personnel, within the limitations imposed by its restricted strength, has been satisfactory. The efficiency of the Instructional Cadre and the assistance its personnel has rendered to the N.P.A.M. particularly at Schools of Instruction is noteworthy.

Courses for both Permanent and Non-Permanent Active Militia were held and attended as shown below:—

COURSES ABROAD

Permanent Force—

Imperial Defence College

Colonel (Temp. Col.-on-Staff) J. S. Brown, C.M.G., D.S.O., R.C.A., January, 1928, to January, 1929.

Staff College, Camberley

Captain F. C. Hanington, M.C., R.C.A., January, 1927, to December, 1928.

Major P. Earnshaw, D.S.O., M.C., R.C.C.S., January, 1927, to December, 1928.

Captain R. O. G. Morton, R.C.A., January, 1928, to December, 1929.

Lieut. (Bt. Capt.) R. G. Whitelaw, R.C.R., January, 1928, to December, 1929.

Captain M. H. S. Penhale, R.C.A., January, 1929, to December, 1930.

Captain J. C. Murchie, R.C.A., January, 1929, to December, 1930.

Staff College, Quetta

Captain (Bt. Major) L. M. Hughes, R.C.A., February, 1927, to December, 1928.

Major E. L. M. Burns, M.C., R.C.E., February, 1928, to December, 1929.

Lieut. (Bt. Capt.) G. R. Bradbrooke, M.C., L.S.H. (R.C.), February, 1929, to December, 1930.

Senior Officers' School

Major (Bt. Lieut-Colonel) L. F. Page, D.S.O., L.S.H. (R.C.), January, 1928, to April, 1928.

Major (Bt. Lieut.-Colonel) R. J. S. Langford, R.C.R., May, 1928, to August, 1928.

Major (Bt. Lieut.-Colonel) J. C. Stewart, D.S.O., R.C.A., October, 1928, to December, 1928.

Major P. Earnshaw, D.S.O., M.C., R.C.C.S., January, 1929, to April, 1929.

R.A.F. Medical Board

Major G. W. Treleaven, D.S.O., M.C., R.C.A.M.C., November, 1927, to July, 1928.

Gunnery Staff Course

Captain H. O. N. Brownfield, M.C., R.C.A., September, 1927, to August, 1928.

Captain D. R. Agnew, R.C.A., September, 1927, to August, 1928.

Captain (Bt. Major) C. V. Bishop, M.C., R.C.H.A., September, 1928, to August, 1929.

School of Military Engineering

Lieut. W. E. Andrewes, R.C.E., August, 1927, to March, 1929.

Lieut. C. Vokes, R.C.E., August, 1927, to March, 1929.

Advanced Class, Military College of Science

Captain G. B. Howard, R.C.O.C., November, 1928, to February, 1931.

Physical Training

Lieut. (Bt. Capt.) R. F. L. Keller, P.P.C.L.I., April, 1927, to June, 1928.

Junior Officers' Course, R.A.S.C. College

Lieut. G. E. R. Smith, R.C.A.S.C., March, 1928, to April, 1930.

Chemical Warfare School

Captain V. Hodson, R.C.R., November, 1928, to January, 1929.

No. 2303 S.S.M.I. (W.O. II) G. H. Clarke, L.S.H. (R.C.), November, 1928, to January, 1929.

Equitation

Captain N. A. Gianelli, L.S.H. (R.C.), January, 1929, to May, 1929.

No. 783 A/Sgt. F. A. Green, R.C.D., July, 1928, to May, 1929.

No. 2754, Sgt. G. E. Reade, L.S.H. (R.C.), July, 1928, to May, 1929.

Ammunition Examiners

No. 34741, L/Cpl. J. P. Daguerre, R.C.O.C., April, 1928, to October, 1928.

Cookery

No. 20501 Sgt. (Cook) A. E. Hird, P.P.C.L.I., May, 1928, to August, 1928.

Attachments and Exchanges

Major (Bt. Lieut.-Colonel) L. F. Page, D.S.O., L.S.H. (R.C.), April, 1928, to June, 1928.

Captain N. A. Gianelli, L.S.H. (R.C.), December, 1926, to November, 1928.

Major (Bt. Lieut.-Colonel) J. C. Stewart, D.S.O., R.C.A., January, 1929, to March, 1929.

Captain (Bt. Major) L. C. Goodeve, D.S.O., R.C.A., April, 1927, to April, 1929.

Captain C. R. S. Stein, R.C.E., October, 1926, to September, 1928.

Major (Bt. Lieut.-Colonel) R. J. S. Langford, R.C.R., August, 1928, to October, 1928.

Captain W. J. Home, M.C., R.C.R., September, 1928, to August, 1930.

Lieut. (Bt. Capt.) J. H. Carvosso, M.C., P.P.C.L.I., September, 1928, to August, 1930.

Capt. (Bt. Major) J. E. H. Tidswell, R.C.A.S.C., October, 1926, to September, 1928.

Lieut. J. L. Sparling, R.C.A.S.C., October, 1928, to September, 1930.

Lieut.-Colonel (Bt. Colonel) J. T. Clarke, C.B.E., R.C.A.M.C., October, 1927, to April, 1928.

Captain J. V. Williams, M.C., R.C.A.M.C., October, 1928, to June, 1929.

Major J. H. MacQueen, R.C.O.C., March, 1928, to April, 1928.

Lieut.-Colonel W. J. Keightley, C.I.A., May, 1928, to June, 1928.

COURSES IN CANADA

Staff College Preparatory Course

A course for officers preparing for the examination for admission to the Staff Colleges at Camberley and Quetta was held at the Royal Military College, Kingston, from October 1, 1928, to February 28, 1929. This course was attended by five officers, all of whom competed at the examination for the three vacancies allotted to Canada. In addition one officer of the Royal Canadian Air Force attended for instruction until the end of September, 1928.

Long Course

This course is held at the Royal Military College, Kingston, and is designed to qualify officers of the Non-Permanent Active Militia for commissions in the Permanent Force. One candidate qualified at the course which commenced in February, 1928, and concluded in June, 1928. Two candidates attended the course which commenced in February, 1929.

Refresher Course

In conjunction with the Long Course a Refresher Course was held for Junior Officers of the Permanent Force which was attended by one officer of the Royal Canadian Corps of Signals.

Artillery Staff Course

This course commenced in October, 1928, and concludes in November, 1929. Two officers and ten non-commissioned officers are attending.

Master Gunners Course

This course which was held from January to May, 1928, was attended by three non-commissioned officers, all of whom qualified.

Royal Canadian School of Military Engineering

Courses for Field Works Instructors and Military Foremen of Works were held for personnel of the Royal Canadian Engineers. A total of seven non-commissioned officers attended.

Signal and Small Arms Courses

See under "Signal Training" (page 26), and "Small Arms Training" (page 28), respectively.

Militia Staff Course

The Militia Staff Course is designed to train officers of the Non-Permanent Active Militia for employment in appointments on the Staff of Formations in the Field.

The practical portion of the sixth post-war course of twelve days' duration was held at Lennoxville, P.Q., for candidates from Eastern Canada and at Sarcee Camp for candidates from Western Canada during the summer of 1928; 42 officers qualified at the former and 28 at the latter. In addition 3 officers attended in the East and 10 in the West as a Refresher Course.

The Theoretical Portion of the seventh post-war course, which consists of a series of lectures, was carried out in the several districts during the winter months; 158 officers attended the written examinations and many others attended the lectures from time to time.

Examination for Promotion to Rank of Colonel, Non-Permanent Active Militia

A special practical examination of three days' duration was held following the Practical Portion of the Militia Staff Course at Lennoxville, P.Q., and Sarcee Camp, in order to qualify Lieutenant-Colonels of the Non-Permanent Active Militia for promotion to the rank of Colonel. Twelve candidates attended the examination at Lennoxville of whom ten were successful. One candidate attended at Sarcee Camp and was successful. In addition six officers attended in the East and one in the West as a Refresher Course.

Cookery Course

The first post-war course in cookery for personnel of the Permanent Force was held at Halifax, N.S., from January 14, 1929, to February 23, 1929. This course was attended by seven candidates, five of whom qualified as Cooks.

Qualifying and Specialists Courses

These courses were held for the personnel of the Non-Permanent Active Militia at Royal and Permanent Schools as follows:—

(For Signals and Small Arms see under reports of these respective branches.)

Military District No.	Schools	Dates		Number Attending	
		From	To	Officers	Other Ranks
2	Royal Canadian School of Cavalry, Toronto.....	15-10-28	8-12-28	13	1
		7- 1-29	2- 3-29	25	31
4	" " " St. Johns.....	15-10-28	8-12-28	10	11
		7- 1-29	16- 2-29	7	13
10	" " " Winnipeg.....	15-10-28	23-11-28	1	.....
		7- 1-29	16- 2-29	9	55
13	" " " Calgary.....	7- 1-29	16- 2-29	16	18
3	Royal Canadian School of Artillery, Kingston.....	5-11-28	1-12-28	2	.....
6	" " " Halifax.....	8-10-28	1-12-28	3	3
		4- 3-29	23- 3-29	2	1
10	" " " Winnipeg.....	8-10-28	1-12-28	4	7
		7- 1-29	1- 3-29	9	32
6	Royal Canadian School of Military Engineering, Halifax.....	6- 7-28	1- 9-28	1	4
	" " " "	11- 1-29	9- 3-29	.....	11
1	Royal Canadian School of Infantry and Machine Guns, London—				
	Infantry.....	15-10-28	24-11-28	10	1
	"	7- 1-29	16- 2-29	15	20
	Machine Guns.....	12-11-28	24-11-28	1	.....
	"	7- 1-29	16- 2-29	2	4
2	Royal Canadian School of Infantry and Machine Guns, Toronto—				
	Infantry.....	15-10-28	24-11-28	27	7
	"	7- 1-29	16- 2-29	42	42
	Machine Guns.....	15-10-28	24-11-28	3	4
	"	21- 1-29	16- 2-29	3	1
4	Royal Canadian School of Infantry, St. Johns, P.Q.				
	Infantry.....	15-10-28	24-11-28	1	1
	"	7- 1-29	16- 2-29	.....	1
5	Royal Canadian School of Infantry and Machine Guns, Quebec—				
	Infantry.....	7- 1-29	16- 2-29	13	12
	Machine Guns.....	7- 1-29	16- 2-29	5	.....
6	Royal Canadian School of Infantry and Machine Guns, Halifax—				
	Infantry.....	15-10-28	24-11-28	10	5
	"	7- 1-29	16- 2-29	13	10
	Machine Guns.....	15-10-28	24-11-28	3	.....
	"	7- 1-29	16- 2-29	5	.....
10	Royal Canadian School of Infantry and Machine Guns, Winnipeg—				
	Infantry.....	5-11-28	24-11-28	1	.....
	"	7- 1-29	16- 2-29	11	41
	Machine Guns.....	7- 1-29	16- 2-29	1	13
11	Royal Canadian School of Infantry and Machine Guns, Esquimalt—				
	Infantry.....	12-11-28	24-11-28	1	.....
	"	7- 1-29	16- 2-29	26	28
	Machine Guns.....	7- 1-29	16- 2-29	4	15
1	R.C.A.S.C. School of Instruction, London.....	15-10-28	24-11-28	4	7
		7- 1-29	16- 2-29	4	3
6	" " " Halifax.....	29-10-28	24-11-28	1	1
		7- 1-29	16- 2-29	1	4
11	" " " Esquimalt.....	5-11-28	24-11-28	1	1

In addition to the above the Provisional Schools conducted for the various arms were:—

Military District No.	Arm	Number of Schools	Average Number Attending	
			Officers	Other Ranks
1	Cavalry	1	8	11
2	"	2	10	22
3	"	2	13	5
5	"	1	5	4
6	"	1	9	8
10	"	1	4	5
11	"	2	9	24
1	Proficiency in Riding	2	30	.....
2	" "	1	1	22
10	" "	3	15	7
1	Artillery	1	6	5
2	"	3	13	33
3	"	4	24	32
4	"	1	5	7
5	"	1	8	6
6	"	1	6	6
10	"	1	9	.....
11	"	3	20	16
12	"	4	9	18
13	"	2	5	8
2	Engineers	2	6	24
3	"	1	1	10
5	"	1	1	5
6	"	1	1	.....
10	"	1	2	12
1	Infantry	8	37	112
2	"	20	130	230
3	"	9	65	134
4	"	5	75	63
5	"	2	16	9
6	"	1	9	2
7	"	3	25	53
10	"	3	22	46
11	"	1	12	26
13	"	2	6	29
1	Machine Guns	1	3	14
2	"	3	17	21
3	"	2	1	19
4	"	1	5	5
6	"	1	1	7
7	"	1	2	4
1	Canadian Army Service Corps	2	4	11
3	" " "	1	7	19
5	" " "	2	11	8
6	" " "	1	5	1
1	Canadian Army Medical Corps	1	7	17
4	" " "	1	20	.....
5	" " "	1	8	22
10	" " "	2	4	15
1	Cadet Instructors	1	.....	19
2	"	4	.....	157
3	"	1	.....	11
4	"	4	.....	55
5	"	1	.....	25
6	"	2	.....	39
11	"	1	.....	28
12	"	1	.....	26
13	"	1	.....	19
3	Buglers and Trumpeters	1	.....	10

The number of officers and other ranks who obtained certificates at these schools and at Camp Schools is shown in statements appearing on pages 22 and 24.

Staff Tours and Tactical Exercises

Staff Tours and Tactical Exercises were carried out throughout the year under arrangements made by District Officers Commanding.

PROMOTION EXAMINATION

A total of fifteen officers presented themselves at the written examination held in October, 1928. Of this number four qualified in one or more subjects for the rank of Major and six qualified for the rank of Captain. Twenty-six candidates sat at the March, 1929, examination, the results of which are not yet to hand.

FOREIGN LANGUAGES

Interpretership Examinations in French for officers were held under the regulations of the British Civil Service Commissioners at centres in Canada in June, 1928, and January, 1929, at which four officers qualified as interpreters as follows: 1st class, 1; 2nd class, 3.

CANADIAN OFFICERS' TRAINING CORPS

In addition to the annual training of C.O.T.C. Contingents as shown under "Training" above there was a very satisfactory attendance of Cadets at the half-yearly examination for Certificates "A" and "B" as shown in the summary of results given below.

The former certificate qualifies a candidate for a commission in the Non-Permanent Active Militia and the latter is equivalent to a certificate for the rank of Captain Non-Permanent Active Militia and exempts the holder from the Test Examination for entrance to the Long Course.

District	Contingent	Strength		Syllabus	Certificate "A"				Certificate "B"			
					Practical		Written		Practical		Written	
		Officers	Other Ranks		Attend	Passed	Attend	Passed	Attend	Passed	Attend	Passed
1	Ontario Agricultural College	3	38	Infantry	7	6	6	2	3	3	3	3
	Western Ontario University	14	99	Infantry	24	15	15	3	1	1	2	0
				Medicals	13	9	9	3	6	4	4	3
				Artillery	10	8	8	6	.....	.....	.....	.....
2	University of Toronto	28	319	Infantry	56	56	53	38	19	18	20	9
				Medicals	6	6	6	5	.....	.....	.....	.....
3	Queen's University	14	199	Infantry	17	17	15	13	15	15	19	5
				Cavalry	16	15	17	12	3	3	3	3
	McGill University	13	87	Signals	6	5	5	3	3	3	2	0
				Infantry	9	8	7	2	5	5	5	1
				Medicals	.....	.....	.....	.....	1	1	1	1
4	University of Bishop's College	2	63	Infantry	7	6	8	0	1	1	1	0
	Loyola College	7	110	Infantry	19	19	18	4	.....	.....	.....	.....
	Universite de Montreal	8	108	Signals	9	9	8	6	.....	.....	.....	.....
				Infantry	18	16	13	3	.....	.....	.....	.....
5	Laval University	7	34	Infantry	29	26	22	5	2	2	2	1
6	Nova Scotia Technical College	3	51	Engineers	34	34	33	29	.....	.....	.....	.....
7	University of New Brunswick	4	141	Infantry	49	39	36	29	19	16	15	4
10	University of Manitoba	25	243	Infantry	33	28	25	14	9	8	8	5
				Medicals	47	40	38	25	.....	.....	.....	.....
11	University of British Columbia	1	112	Infantry	3	3	3	3	.....	.....	.....	.....
12	University of Saskatchewan	17	173	Infantry	47	43	43	22	20	19	19	10
13	University of Alberta	23	384	Infantry	30	24	23	12	6	6	6	5
				Medicals	17	12	11	8	.....	.....	.....	.....

RETURN OF CERTIFICATES OF QUALIFICATION GRANTED BETWEEN APRIL 1, 1928, AND MARCH 31, 1929

Officers

Name of School	Majors	Captains	Lieutenants	Quartermasters	Transport Officers	Paymasters	Proficiency in Riding	Cadet Services of Canada (N.P.) Grade "A"	C.S.A.S.			Signalling									Partial Qualifications												Totals
									"A" Wing	"B" Wing	"C" Wing	Instructors V.T.	Instructors L.T.	V.T. Class I	V.T. Class II	L.T. Class I	L.T. Class II	W.T. Class II	Operator V.T.	Operator L.T.	C.O.T.C. and R.M.C. Cadets	Part I						Part II		C.O.T.C., Certificate "A"	C.O.T.C., Certificate "B"	C.O.T.C., Certificate "B" (Interim)	Certificates of Mil. Qual., R.M.C.	Passed	Instructors P.T.	
																						Majors	Captains	Lieutenants	Quartermasters	"A" Wing, C.S.A.C.	"B" Wing, C.S.A.C.	(J) (i) M.G. Subjects	Captains	Lieutenants							
Royal Canadian School of Cavalry, Toronto, Ont.	1	3	3	....	....	....	10	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	17
Royal Canadian School of Cavalry, St. Johns, P.Q.	3	5	7	....	....	....	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	17
Royal Canadian School of Cavalry, Winnipeg, Man.	....	3	4	....	....	....	3	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	10
Royal Canadian School of Cavalry, Calgary, Alta.	3	2	10	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	15
Royal Canadian School of Artillery, Kingston, Ont.	5	1	13	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	19
Royal Canadian School of Artillery, Halifax, N.S.	....	....	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	2
Royal Canadian School of Artillery, Winnipeg, Man.	3	3	4	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	10
Royal Canadian School of Artillery, Esquimalt, B.C.	....	1	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	2
School of Military Engineering, Halifax, N.S.	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1
Royal Canadian School of Signals	....	....	*5	....	....	....	....	....	....	....	....	5	2	....	....	....	....	....	15	6	....	....	....	....	....	....	....	....	....	....	....	....	33
Royal Canadian School of Infantry and Machine Guns (I.), London, Ont.	5	5	15	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	25
Royal Canadian School of Infantry and Machine Guns (M.G.), London, Ont.	....	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	2
Royal Canadian School of Infantry and Machine Guns (I.), Toronto, Ont.	13	31	47	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	91
Royal Canadian School of Infantry and Machine Guns (M.G.), Toronto, Ont.	....	6	5	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	11
Royal Canadian School of Infantry and Machine Guns (I.), Quebec, P.Q.	5	3	5	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	13
Royal Canadian School of Infantry and Machine Guns (I.), Halifax, N.S.	11	5	8	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	24
Royal Canadian School of Infantry and Machine Guns (M.G.), Halifax, N.S.	1	9	8	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	18
Royal Canadian School of Infantry and Machine Guns (I.), Winnipeg, Man.	8	10	20	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	38

Royal Canadian School of Infantry and Machine Guns (M.G.), Winnipeg, Man.			1																												1
Royal Canadian School of Infantry and Machine Guns (I.), Esquimalt, B.C.	3	7	13																												23
Royal Canadian School of Infantry and Machine Guns (M.G.), Esquimalt, B.C.			1																												1
Royal Canadian School of Infantry, St. Johns, P.Q.	1		3																												4
Canadian Small Arms School									113	31	3										8	8									163
Royal Canadian Army Service Corps School of Instruction	2	3	4	8			44																								61
Provisional Schools of Cavalry																	8	12	27												47
Provisional Schools of Artillery																	11	23	31												65
Provisional Schools of Engineers																		6	4												10
Provisional Schools of Signals												37	2	17	1	3															60
Provisional Schools of Infantry					2												36	108	218												364
Provisional Schools of Machine Guns																	4	8	17				8								37
Provisional Schools of C.A.S.C.																	1	1	1	8											11
Provisional Schools of C.A.M.C.	1	6	7																13												27
Provisional Schools of Physical Training																														7	7
Royal Military College, Kingston, Ont.							2																						17		19
Camp Schools of Cavalry	2	5	20				46																	1							74
Camp Schools of Artillery	5	20	16																				1	1							43
Camp Schools of Engineers		5	1																												6
Camp Schools of Infantry	42	80	145	8	1		65	21															1	8							371
Camp Schools of Machine Guns	2	10	20																				7								39
Camp Schools of C.A.S.C.	1	11	9	4			1																								26
Camp Schools of C.A.M.C.		2	1																												3
Cadet Instructors' Course, London, Ont.								12																							12
Cadet Instructors' Course, Toronto, Ont.								85																							85
Cadet Instructors' Course, Hamilton, Ont.								25																							25
Cadet Instructors' Course, Kingston, Ont.								10																							10
Cadet Instructors' Course, St. Anne de Bellevue, P.Q.								9																							9
Cadet Instructors' Course, St. Johns, P.Q.								20																							20
Cadet Instructors' Course, Three Rivers, P.Q.								17																							17
Cadet Instructors' Course, Victoriaville, P.Q.								7																							7
Cadet Instructors' Course, Quebec, P.Q.								21																							21
Cadet Instructors' Course, Truro, N.S.								18																							18
Cadet Instructors' Course, Victoria, B.C.								30																							30
Cadet Instructors' Course, Fort Qu'Appelle, Sask.								24																							24
Cadet Instructors' Course, Calgary, Alta.								19																							19
Canadian Officers' Training Corps, Candidates																											211	44	45		300
Board of Examiners	3	1					47																								51
Militia Staff Course																													69		69
Examination for Lieut.-Colonel																													34		34
Examination for Colonel																													†17		17
Proficiency in Riding Courses							17																								17
Totals	120	240	398	20	1	2	237	318	113	31	3	5	2	37	2	17	1	3	15	6	60	158	311	8	8	8	15	2	10	211	44	45	17	120	7	2,595

*Less Riding.
†6 Refresher.

COURSES IN ENGLAND

Gunnery Staff Course..... 2 Classification "g*†".
School of Chemical Warfare.. 1 Classification Q 1.

Grand Total..... 2,595

RETURN OF CERTIFICATES OF QUALIFICATION GRANTED BETWEEN APRIL 1, 1928, AND MARCH 31, 1929—*Con.*

WARRANT OFFICERS, NON-COMMISSIONED OFFICERS AND MEN

Name of School	W.O. II	Sergeants	Bombardiers and Corporals	Trumpeters	Gunlayers, C.D. and A.A.	D.R.F.	Shoeing-smith	Battery Commander's Assistant	Master-Gunner	Proficiency in Riding	Artillery Specialists	Grade "B" Physical Training	Signalling: Asst. Instructor V.T.	Asst. Instructor L.T.	V.T. Class I Special	V.T. Class I	V.T. Class II	V.T. Class III	L.T. Class I	L.T. Class II	Cadet Signalling: Semaphore, 1st Year	Morse, 2nd Year	Advanced, 3rd Year	Specialists (P.F.): Stencgraphy	Typewriting	P.T. Instructor	Field Works Instructor, Class II	S/Sergt. Engineer Draughtsman	Mil. Foreman of Works S/Sergt.	Engineer Clerk S/Sergt.	Mech. Coxswain S/Sergt.	Topographical Surveyor	Dispenser Part "A"	Dispenser Part "B"	Cooks	C.S.A.S.: "A" Wing	"B" Wing	"C" Wing	Machine Gun Subjects	Partial Qualifications: Part I: W.O. II	Part I: Sergeants	Part I: Bombardiers and Corporals	Part II: W.O. II	Part II: Sergeants	Part II: Bombardiers and Corporals	Total
Royal Canadian School of Cavalry, Toronto, Ont.	1	3	16	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	20
Royal Canadian School of Cavalry, St. Johns, P.Q.	..	9	16	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	25
Royal Canadian School of Cavalry, Winnipeg, Man.	3	16	47	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	67
Royal Canadian School of Cavalry, Calgary, Alta.	4	15	9	..	..	..	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	32
Royal Canadian School of Artillery, Kingston, Ont.	5	51	21	2	..	..	..	..	3	..	23	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	79
Royal Canadian School of Artillery, Halifax, N.S.	..	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	30
Royal Canadian School of Artillery, Winnipeg, Man.	4	28	9	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	41
Royal Canadian School of Artillery, Esquimalt, B.C.	..	4	7	..	4	29	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	85
School of Military Engineering, Halifax, N.S.	1	9	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	21
Royal Canadian School of Signals	*4	*9	..	..	..	..	..	..	..	1	..	..	45	4	..	..	..	..	..	..	..	..	..	..	..	..	..	3	2	4	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	63
Royal Canadian School of Infantry and Machine Guns (Inf.), London, Ont.	10	33	13	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	56
Royal Canadian School of Infantry and Machine Guns (M.Gs.), London, Ont.	4	8	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	16
Royal Canadian School of Infantry and Machine Guns (Inf.), Toronto, Ont.	16	71	19	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	106
Royal Canadian School of Infantry and Machine Guns (M.Gs.), Toronto, Ont.	..	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3
Royal Canadian School of Infantry and Machine Guns (Inf.), Quebec, P.Q.	4	20	11	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	35

| | | |

SIGNAL TRAINING

General

Signal training for personnel of the Royal Canadian Signals, Canadian Signals and Regimental Signallers of the Permanent Force and Non-Permanent Active Militia has continued to make progress during the year.

Regimental Signallers of Permanent Force Units

The Annual Technical Inspection and Classification of Signallers of Permanent Force units was satisfactory. The number of non-commissioned officers and men under training and presented for classification shows a fair percentage of the limited establishments. There is still a great deal of need that junior officers be trained in units in order that they may supervise and encourage signal training within their units. The results in the Permanent Force generally for the past year are:—

Classified			Under training		
Officers	N.C.Os.	Privates	Officers	N.C.Os.	Privates
.....	46	44	4	13	32

Results of Annual Technical Inspection and Classification of Signal Sections. Non-Permanent Active Militia

The results for the year ending 31st March, 1929, are as follows:—

(a) VISUAL TELEGRAPHY

Military District	Number of Classifications	Signallers Presented	Number Classified
No. 1	27	252	235
No. 2	39	355	321
No. 3	33	378	236
No. 4	24	161	138
No. 5	23	155	143
No. 6	32	251	203
No. 7	17	172	126
No. 10	19	128	116
No. 11	16	109	96
No. 12	20	90	68
No. 13	23	93	81
Totals	273	2,144	1,763

(b) LINE TELEGRAPHY

Military District	Number of Classifications	Signallers Presented	Number Classified
No. 1	8	15	13
No. 2	11	30	27
No. 3	12	39	38
No. 4	4	8	8
No. 5	9	11	11
No. 6	5	12	12
No. 7	4	16	16
No. 10	6	12	12
No. 11	2	5	5
No. 12	8	12	12
No. 13	.....	.....	.....
Totals	69	160	154

(c) WIRELESS TELEGRAPHY

Military District	Number of Classifications	Signallers Presented	Number Classified
No. 7	1	3	3

Royal Canadian School of Signals

The Royal Canadian School of Signals operated a summer school at Camp Borden, Ont., during 1928. Qualifying courses were held for officers and non-commissioned officers of the Canadian Signals and visual and line telegraphy courses for Permanent Force and Non-Permanent Active Militia personnel. The following table shows the attendance and results of these classes:

	Officers	Other Ranks
(a) Attendance—		
Permanent Force	1	10
Non-Permanent Active Militia	12	63
R.M.C. and C.O.T.C. Cadets	25	–
Total	38	73
(b) Qualifications Obtained—		
Instructors and Assistant Instructors, Visual Telegraphy	5	45
Instructors and Assistant Instructors, Line Telegraphy	2	4
Qualifying—		
Lieutenant	5	–
Warrant Officer	–	4
Sergeant	–	9
R. M. C. and C.O.T.C. Cadets—		
Operator, Visual Class I	15	–
Operator, Line, Class I	6	–
Total	33	62

Provisional Schools of Signals

During the year the following provisional schools were conducted:—

Visual Telegraphy	69
Line Telegraphy	8
Wireless Telegraphy	1

The number of certificates awarded as a result of the above schools is as follows:—

	Officers	Other Ranks
(a) Visual Telegraphy		
Class I—Special	–	23
Class I	37	516
Class II	2	240
Class III	–	72
Total V/T	39	851
(b) Line Telegraphy—		
Class I	17	38
Class II	1	6
Total L/T	18	44
(c) Wireless Telegraphy—		
Class II	3	–
Total W/T	3	–

At local headquarters, when an evening Provisional School of Signals is conducted, instruction in signalling is arranged for cadets who are twelve years of age or over and are enrolled members of an authorized Cadet Corps. Boys who undergo this training make particularly desirable recruits for units of the Canadian Signals and are joining the Non-Permanent Signal Service in increasing numbers each year.

During the year under report the following cadets were awarded certificates:—

1st year (Semaphore)	1,171
2nd year (Morse)	232
3rd year (Advanced)	100
Total	1,503

Award of Trophies

The Signallers Challenge Cup, for annual competition between regimental signal sections of the Non-Permanent Cavalry and Infantry units, was won for the year 1928 by The Toronto Regiment, Military District No. 2.

The Cavalry Signallers Challenge Cup, presented by the Canadian Cavalry Association for annual competition between regimental signal sections of the Non-Permanent Cavalry, was won for the year 1928 by the 7th Hussars, Military District No. 5.

SMALL ARMS SCHOOL

Small Arms Training

During the period under review, training in the rifle, bayonet, light automatic, machine gun, revolver, section leader training and anti-gas measures, was carried out in the Permanent and Non-Permanent Active Militia.

The following annual range courses were fired:—

Permanent Active Militia

Recruits of cavalry and infantry fired an elementary course in the rifle and light automatic. Recruits of other units fired a modified course. Trained soldiers of cavalry and infantry fired the advanced classification course with rifle and light automatic, and those of other units fired a shorter course more suitable to their requirements.

The machine gun sections of infantry units fired the course laid down for the British Army.

The results obtained in the foregoing range courses showed a satisfactory improvement over the previous year.

Non-Permanent Active Militia

The program of weapon training is published in "Memorandum for Camps of Instruction, Part I," the various courses being based on those laid down for the British Territorial Army. The results show a further increase in the numbers trained in the light automatic.

Best Shot Badges

Best Shot Badges for the year 1928 were awarded to the best shot in the Royal Military College and in each squadron, battery, company, independent troop or headquarters wing of cavalry, artillery, engineers, corps of signals, officers' training corps, infantry, machine gun corps and army service corps of the Non-Permanent Active Militia.

The badge is awarded to the non-commissioned officer or man obtaining the highest score in the classification practices of the annual rifle course, and the names of winners are published in Militia Orders.

Returns show an increase of 66 badges over the number awarded the previous year.

Cambridge Challenge Bowl Competition

The Cambridge Challenge Bowl was won in 1928 by Headquarters, The Royal Canadian Regiment, London, Ont., with an average score of 114·0 points.

This trophy was donated by officers of His Majesty's Regular Army on leaving Canada in 1904, and is awarded to the squadron, battery, company, headquarters or detachment of any unit of the Permanent Force having a strength of thirty all ranks or over obtaining the highest average in the annual rifle course. To be eligible 80 per cent of the competing unit must take part in the competition.

King's Medal, 1928

The King's Medal for the champion shot of the Military Forces of the Dominion of Canada was won by Brevet Major J. Jeffery, O.B.E., M.C., The Royal Canadian Regiment.

Rifle Associations

On March 31, 1929, there were in existence 185 Military Rifle Associations and 89 Civilian Rifle Associations.

The Dominion of Canada Rifle Association and all Provincial Rifle Associations held prize meetings during the period under review.

Courses at the Canadian Small Arms School

Courses were held during the summer of 1928 for personnel of the Permanent and Non-Permanent Active Militia in the rifle, bayonet, light automatic, Vickers machine gun, revolver, section leader training and anti-gas measures. The Main School was held at Connaught Rifle Range, Ottawa, for units of Eastern Canada, and a Branch School was held at Camp Hughes, Manitoba, for candidates from the Western Military Districts. Two hundred and eighty-five officers, W.Os. and N.C.Os. qualified in small arms during the year.

The following are the results of the courses:—

AT CONNAUGHT RIFLE RANGE

Number and Nature of Course	Passed	Failed
Course No. 69.—Rifle (Service and Miniature)—		
Cadet Instructors	41	.....
Course No. 70.—Rifle and Light Automatic—N.P.A.M.—		
Officers	31	.....
W.Os. and N.C.Os.	23	.....
Course No. 71.—Vickers Machine Gun, Range-finder and Revolver—N.P.A.M.—		
Officers	15	1
W.Os. and N.C.Os.	5	2
Course No. 72.—Rifle, Light Automatic and Section Leader Training—P.F.—		
W.Os. and N.C.Os.	19	.....
Course No. 73.—Vickers Machine Gun, Range-finder and Revolver—P.F.—		
W.Os. and N.C.Os.	13	.....
Course No. 74.—For N.P.A.M. who have passed Part I of a Provisional School of Small Arms—		
Officers	.....	.....
W.Os. and N.C.Os.	.....	.....
Course No. 75.—Rifle and Light Automatic—N.P.A.M.—		
Officers	11	.....
W.Os. and N.C.Os.	15	1
Course No. 76.—Vickers Machine Gun, Range-finder and Revolver—N.P.A.M.—		
Officers	6	.....
W.Os. and N.C.Os.	10	.....
Course No. 77.—Anti-gas Measures—P.F.—		
Officers	3	.....
W.Os. and N.C.Os.	19	.....
Course No. 78.—P.F. "A" Wing, Part II—Rifle, Light Automatic and Section Leader Training—		
Officers	7	.....
W.Os. and N.C.Os.	.....	.....
Course No. 79.—P.F. "B" Wing, Part II—Vickers Machine Gun, Range-finder and Revolver—		
Officers	7	.....
W.Os. and N.C.Os.	9	.....

AT CAMP HUGHES, MANITOBA

Number and Nature of Course	Passed	Failed
Course No. 80.—Rifle (Service and Miniature)—		
Cadet Instructors	2	.....
Course No. 81.—Rifle and Light Automatic—N.P.A.M.—		
Officers	6	.....
W.Os. and N.C.Os	6	.....
Course No. 82.—Vickers Machine Gun, Range-finder and Revolver, N.P.A.M.—		
Officers	2	.....
W.Os. and N.C.Os	3	.....
Course No. 83.—Rifle, Light Automatic and Section Leader Training—P.F.—		
W.Os. and N.C.Os	10	.....
Course No. 84.—Vickers Machine Gun, Range-finder and Revolver—P.F.—		
W.Os. and N.C.Os	4	.....
Course No. 85.—Rifle and Light Automatic—N.P.A.M.—		
Officers	5	1
W.Os. and N.C.Os	2	1
Course No. 86.—Vickers Machine Gun, Range-finder and Revolver—N.P.A.M.—		
Officers	2	.....
W.Os. and N.C.Os	2	.....
Course No. 87.—P.F. "A" Wing, Part II—Rifle, Light Automatic and Section Leader Training—.		
Officers	2	.....
W.Os. and N.C.Os	.....	.....
Course No. 88.—P.F. "B" Wing, Part II—Vickers Machine Gun, Range-finder and Revolver—		
Officers	3	.....
W.Os. and N.C.Os	2	.....

Small Arms Training and Rifle Association Activities

Statistical tables to afford comparison between the progress of Small Arms Training in the Non-Permanent Active Militia and the activities of Military and Civilian Rifle Associations:—

TABLE 1.—SMALL ARMS TRAINING

(a) Number of candidates at the School of Musketry, Canadian Warfare School and Canadian Small Arms School:—

(i) Main School (Ottawa)

1910	1911	1912	1913	1914	1921	1922	1923	1924	1925	1926	1927	1928
122	103	195	275	285	129	47	120	175	229	213	289	238

(ii) Branch School (Camp Hughes and Camp Sarcee)

1923	1924	1925	1926	1927	1928
(Hughes)	(Hughes)	(Sarcee)	(Hughes)	(Sarcee)	(Hughes)
49	93	138	90	128	53

(b) PROPORTION of N.P.A.M. exercised in range practices, in relation to totals of all ranks actually trained and eligible to fire: (Numbers so exercised shown under percentages):—
Arms of Service included are as follows:—Cavalry, Engineers, Signals, C.O.T.C., Infantry, Machine Gun Corps and C.A.S.C.
Weapons used:—Rifle, Light Automatic and Vickers Machine Gun.

1920	1921	1922	1923	1924	1925	1926	1927	1928
27%	30%	32%	30%	42%	51%	52%	53%	56%
4310	10409	9222	9781	11440	12758	13126	16052	16898

(c) Best Shot Rifle Badges awarded to N.P.A.M. units:—

1910	1911	1912	1913	1914	1920	1921	1922	1923	1924	1925	1926	1927	1928
119	127	128	146	88	13	80	50	59	177	308	309	* 442	508

Notes.—(*) From 1927 inclusive, the conditions were modified to permit the award of this badge (at discretion of D.O's. C.) on the results of four or three practices instead of five.

Table 2.—RIFLE ASSOCIATIONS

Number of Military and Civilian Rifle Associations existing in each year:—

(i) *Military Rifle Associations*

1920	1921	1922	1923	1924	1925	1926	1927	1928
Reorganized	87	131	130	154	159	163	173	179

(ii) *Civilian Rifle Associations*

1920	1921	1922	1923	1924	1925	1926	1927	1928
Reorganized	(†) 225	124	110	112	111	109	100	100

(†) Only 88 civilian associations were active in the year 1921.

(3) Armament

Existing armament has been maintained in a serviceable condition as far as limited funds permitted, but spare stocks are being steadily depleted by ordinary wear and little replacement has been possible.

The situation as regards technical stores for Field Army Artillery has been slightly improved, but large replacements of worn equipment will soon become necessary.

Reserves of Coast Defence and Field Army Artillery ammunition are still far below the minimum required, although provision has been made for some replacement of ammunition expended in practice.

Anti-Aircraft equipment is much out of date, but it has been impossible, up to the present, to replace any of it with modern equipment owing to the limited funds available.

(4) Operation of Wireless Systems

During the fiscal year 1928-29 a total of twenty-three radio stations were operated by the Royal Canadian Signals throughout the Dominion of Canada. This number includes six new stations established during that period. The following list shows the distribution of the twenty-three stations with three additional stations which have since been added:—

1. *Northwest Territories and Yukon.*
   Aklavik, N.W.T.
   Dawson City, Y.T.
   Edmonton, Alberta.
   Herschel Island, Y.T.
   Mayo, Y.T.
   Fort Resolution, N.W.T.
   Fort Simpson, N.W.T.
   Fort Smith, N.W.T.

2. *Alberta.*
   High River.
   Grande Prairie. (Air to Ground only.) Established May, 1929.

3. *Saskatchewan.*
   Ille-a-la-Crosse.
   Lac-la-Ronge.
   Ladder Lake.
   Prince Albert.
   Waskesiu.
   Pelican Narrows. (Established April, 1929.)

4. *Manitoba.*
   Cormorant Lake.
   Lac-du-Bonnet.
   Norway House.
   Winnipeg.
   Winnipegosis.
   Berens River. (Established May, 1929.)

5. *Ontario.*
   Camp Borden.
   Ottawa.

6. *Hudson Strait.*
   S/W. Communications from Expedition Headquarters to Ottawa.

7. *Air Mail.*
   St. Hubert, P.Q.

1. *The Northwest Territories and Yukon Radio System.*

The stations of this system are located in the Northwest Territories and the Yukon and handle all classes of commercial traffic with direct wire connections at Edmonton, Alberta, with the Canadian National Railway and Canadian Pacific Railway telegraph system and by radio with the Alaskan Radio System from Dawson City, Yukon, to Circle, Alaska.

Trading vessels operating in the Western Arctic, obtain radio connections through Aklavik.

By arrangement with the Royal Canadian Mounted Police and the Hudson Bay Company, the R.C.M.P. schooner *St. Roch* which wintered at Coronation and the H.B. schooner which usually winters at Cambridge Bay, Coronation Gulf, transmit and receive traffic through the N.W.T. Station at Aklavik.

One of the most important features in connection with the operation of this system, is the fact that all Officers and Other Ranks of the Royal Canadian Signals are trained Meteorological Observers, and from each station of this system, observations are taken twice daily and transmitted to the Headquarters of the Meteorological Services at Toronto.

Traffic reports for 1928-29 give the following returns:—

	Messages Sent	Receipts
Total	13,915	$36,051 44

2. *The Civil Government Air Operations Branch.*

In connection with Forestry Patrols in Manitoba and Saskatchewan, the following stations have been added to this system:—

In Manitoba—Winnipegosis and Berens River.

In Saskatchewan—Prince Albert, Ladder Lake, Ille-a-la-Crosse, Lac-la-Ronge, Waskesiu, and Pelican Narrows.

All stations operated for the C.G.A.O., handle air to ground communications as well as station to station traffic for the Air Force and Forestry Department officials. Since February, 1929, commercial traffic has also been accepted.

Results of Patrols carrying Radio Apparatus, May to October, 1928:—

	Successful	Partially Successful	Unsatisfactory
Total..	74	16	11

3. *Ontario.*

The Ottawa-Camp Borden Radio System continues to be maintained for training.

4. *Hudson Straits Expedition.*

A detachment, consisting of one officer and three non-commissioned officers, accompanied the Hudson Straits Expedition, which went north in July, 1927, for the purpose of supervising the installation and maintenance of air craft radio sets and the operation of the ground reception sets. Three stations were established by the expedition, one at Cape Burwell, one at Wakeham Bay and one at Nottingham Island.

The headquarters of the expedition at Wakeham Bay was in direct communication with the R.C.S. Short Wave Station at Ottawa and from July 20 until December 22, 1,085 messages consisting of 48,625 words were handled.

RESULTS OF PATROLS CARRYING RADIO APPARATUS

Station	Number of Patrols		
	Successful	Partially	Unsatisfactory
Burwell	42	1	1
Nottingham	62	2	2
Wakeham Bay	63	2	0
Total*	167	5	3

*Range of Aircraft sets: Telephony, 100 miles. Telegraphy, 300 miles.

5. *Air Mail Service.*

The question of the establishment of radio beacon stations in connection with air mail routes is under consideration and preliminary experiments are being carried out. Equipment has been ordered for the first two stations of the Winnipeg-Banff route which will be installed at Brandon and Regina, this fall.

Plans are also under way to install beacons between Montreal and Windsor. At the St. Hubert Aerodrome, near Montreal, a 4 K.V.A. Marconi set has been installed for obtaining weather reports concerning the Ottawa-Montreal, Montreal-Toronto, Montreal-Rimouski and Montreal-New York air routes. This station also intercepts weather reports broadcasted by radio from selected stations in Canada and the United States for the officials of the Meteorological Service who prepare the daily weather maps at this station.

6. *Short Wave Communication.*

During the past year it has been found advantageous to relay through Australia, service traffic between Ottawa and London, England, since direct communication has not been satisfactory, while between Canada and Australia and Australia and England it has been found to be nearly always good.

The Ottawa Short Wave Station is now handling considerable departmental traffic between National Defence Headquarters and the Naval Stations at Halifax and Esquimault.

Several Divisional Signal Units of the Non-Permanent Active Militia have established Short Wave stations. A number of others are preparing to do so this coming fall and winter. The R.C.S. Station at Ottawa acts as the control station. Regular schedules are maintained with Signal Units located at Edmonton, Alta., Humboldt, Sask., Winnipeg, Man., Port Arthur, Ont., Toronto, Ont., and St. John, N.B.

7. *Experimental Work.*

During the year, experimental work has been carried out as under.

A new radio set of 100 watts output has been developed for use where the distances to be covered is of the order of 150 miles or less. Ten sets, now in operation, are giving satisfactory results.

In connection with the redesigned T21 Aircraft Transmitter, known as the C.T.21 Set, and previously reported in detail, it is proposed to convert this set in order that dual purpose generators may be used and eliminate storage batteries.

Considerable experimental work is being carried out on two way working, between air and ground. This has involved the study of the problems of magneto interference and elimination of engine noises.

In conjunction with the Northern Electric Company, an intercommunication telephone set has been developed for use between pilot and observer or passengers. This has long been desired, particularly by those engaged in aerial photography.

Considerable work has been carried out in an attempt to provide a satisfactory emergency power unit for aircraft when on the floor. A set suitable for comparatively short ranges has been developed but for longer distances, the question of weight has still to be settled.

Tests are to be made using a 40-pound engine of small dimensions which can be coupled to the regular aircraft generator.

8. *The Royal Canadian Corps of Signals.*

In co-operation with the Canadian National Railways, the Canadian Marconi Company and McGill University, a series of experiments were carried out in the Mount Royal Tunnel, on the transmission of radio signals through the ground. Very satisfactory results were obtained. A full report appeared in the February issue of the Institute of Radio Engineers.

(5) Physical Training and Cadet Services

PHYSICAL EDUCATION OF SCHOOL TEACHERS

In accordance with the agreement entered into between the several provincial educational authorities and this department, physical instructors continue to be loaned for duty at Provincial Normal Schools. During the year under review, 28 Instructors from the Permanent Force were constantly employed, together with 15 civilians, to whom a bonus was paid.

Student teachers were organized into classes, 75 of which, with a total attendance of 10,414, were completed during the year, while 17 other courses attended by 3,279 candidates were still in progress. Certificates of qualification were issued to 6,644 candidates during the year.

CADET CORPS

The number of units carrying out training was 926, with a strength of 129,758. This strength is arrived at by taking the number of Cadets actually present on parade at the annual inspection held during the months of May and June, and adding the number of Cadets enrolled in units organized since the

reopening of schools in September. These Cadets are distributed by provinces as under:—

—	Cadet Corps	Strength
Alberta	44	5,962
British Columbia	36	6,431
Manitoba	39	3,400
New Brunswick	60	2,754
Nova Scotia	43	2,927
Ontario	298	37,328
Prince Edward Island	8	660
Quebec	319	66,070
Saskatchewan	79	4,226
Total	926	129,758

The Shield presented by Earl Grey, when Governor General of Canada, for award to the province having the largest number of Cadets in proportion to boys attending school, continues to be held by the province of Quebec.

CADET TRAINING

Generally speaking Cadet Corps are making satisfactory progress. Physical exercises and organized games, which occupy a large part of the training periods, are found to be beneficial, as are also the close order movements.

Instruction in Signalling continues and during the year, 1,503 Cadets received certificates of qualification.

Instruction in First Aid also forms an important subject in the Cadet Syllabus, and Units from all provinces now compete regularly for the numerous trophies offered for efficiency in this subject.

MINIATURE RIFLE PRACTICE

Miniature rifle practice is becoming more popular, and the annual expenditure of ·22″ ammunition is on the increase. That the instruction is on sound lines may be determined by the success of Canadian Cadets in the rifle match open to boy marksmen of the Empire for the Imperial Challenge Shields. During the year under review, these were competed for by 33,000 boys, and the Senior Shield awarded to the unit in which senior boys predominate, and which makes the best average in the Empire, was won by the Central Collegiate Institute Cadets of Hamilton, Ont., with the Delta Collegiate Institute, Hamilton, second, and the Commercial Academy Cadet Corps, Quebec, P.Q., third. Canadian Cadets also secured second and third places for the Jellicoe Sword, and third for the Junior Imperial Shield. They also won 82 Silver and 152 Bronze Medals, whereas the rest of the Empire combined succeeded in winning only 35 of these medals in silver and 89 in bronze.

In a general summary of the results published by the National Rifle Association, the following clause appears, in regard to Canada:—

"The excellent results obtained appear to be due to two causes; not only does Canada possess many more brilliant individual shots than any other country but she has a limited number of Units capable of achieving very special distinction."

SERVICE RIFLE COMPETITIONS

A limited number of Cadet Corps take part in matches with the service rifle. Last summer, the Cup presented by His Majesty the King for competition under service conditions was awarded to the Carling Avenue Collegiate Institute, Ottawa, while a trophy presented by the Royal Military College Club for competition under somewhat similar conditions was won by the Central Collegiate Institute, Hamilton.

CADET INSTRUCTORS' COURSES

During the year a number of qualifying courses were held at various centres, at which 318 male school teachers obtained certificates qualifying them to instruct Cadet Corps. Forty-two Instructors obtained qualifying certificates from the Canadian Small Arms School courses.

VISITING CADETS

During the month of August, a detachment of Cadets of the British Officers' Training Corps visited Canada under Major J. A. O. Muirhead. The cost of this visit was defrayed largely by Sir Charles Wakefield, who generously sent by the Commandant a magnificent cup to be shot for annually in Canada by Cadets. The trophy was handed to the Dominion of Canada Rifle Association, who immediately arranged the details of the first competition. The English Cadets and a number of boys from various schools in Canada took part, the trophy being won by Cadet R. Auty of Guelph, Ont.

(6) Historical Section

COLLECTION, CLASSIFICATION AND DISPOSAL OF DOCUMENTS

During the year 1,992 files were classified, indexed and listed for reference purposes.

A detailed descriptive index of the Canadian Official War photographs, numbering over 7,000, has been compiled; a distribution of copies to veteran and other organizations was made, in order that prints might be made available for purchase by the public. The catalogues and prints were turned over to the Photographic Section, R.C.A.F., which has undertaken the work of reproduction.

Historical material relating to the Great War, consisting of reports, files, operation orders, and other documents dealing with the acitvities of Canadian units and formations has been received from Major-General J. H. Elmsley, Flight-Lieut. C. H. Awcock (6th Squadron R.F.C.), Major J. S. Matthews, and Lieut. S. Fraser.

The triplicate copies of War Diaries of the 4th Canadian Divisonal Artiltillery, 4th Brigade, C.F.A., 7th Siege Battery, and the 20th, 44th, 49th, 73rd, and 78th Infantry Battalions, C.E.F., have been checked, missing folios to the number of 845 duplicated from originals, and the completed diaries transferred to the custody of perpetuating units for the use of regimental historians.

PERPETUATION OF C.E.F. UNITS AND AWARDS OF BATTLE HONOURS

Three hundred and four lists were prepared, covering eighty-two regiments of the Canadian Permanent and Non-Permant Active Militia and 222 units of the Canadian Expeditionary Force, for the purpose of selection of Honours by Regimental Committees for Colours or Appointments.

One hundred and forty-nine lists, covering forty-nine regiments of the Canadian Permanent and Non-Permanent Active Militia and 102 units of the C.E.F., were prepared and forwarded for submission to His Majesty the King.

To determine the priority of claimants to the perpetuation of forty-two C.E.F. units, exhaustive research was entailed to establish in each case (i) quota furnished by Militia Regiment, (ii) localities whence recruited, and (iii) sailing strength on leaving Canada. Statements were also compiled detailing the Honours which would accrue to Militia Regiments on perpetuation of these Battalions.

A chart was drawn up showing the fifty-two titles on Scrolls, required for Standards, Guidons and Colours, covering all selections of honours, by regiments, up to October 29, 1928.

All claims of units for Honours have been investigated and statements furnished showing the number of men of perpetuated battalions in action in specified battle areas.

Selections of Honours for Colours and Appointments have been checked and recorded, and explanatory information incidental thereto has been supplied.

Ten meetings of the Battle Honours Committee were attended by the Director and the Secretary of the Battle Honours Committee; minutes and reports were drafted and information supplied as called for by the committee.

COMPILATION OF AN HISTORICAL ACCOUNT OF THE CANADIAN FORCES IN THE GREAT WAR

Work has been continued on material for the first general volume of the official history; the special maps being compiled to illustrate this volume are nearing completion.

During the year three regimental histories have been published: "The 6th Field Company and Battalion C.E." "No. 3 Canadian General Hospital (McGill)", and "The 4th Brigade C.F.A." In each of these books generous acknowledgment is made of the services rendered by the Historical Section in the checking of typescript and in the supply of notes, comments and documents in connection therewith. Information was also furnished for the histories of the 2nd, 16th and 38th Battalions and 7th Canadian Siege Battery.

PREPARATION OF HISTORICAL MONOGRAPHS, NARRATIVES, ETC., IN CONNECTION WITH THE MILITARY HISTORY OF CANADA

Monographs have been compiled for official and other purposes on:—

Early History of the Militia of Canada (New France 1627-1660). (32 pp.)

The Department of National Defence as an aid to the Civil Development of the Dominion. (50 pp.)

Notes on Military Districts Nos. 1, 10, 11, 12, 13. (238 pp.)

Information relating to the Military Efforts of Prince Edward Island, Nova Scotia, New Brunswick, and Manitoba, 1914-1919. (39 pp.)

Notes on the History of the Toronto Garrison 1792-1928. (21 pp.)

The Multi-Lateral Peace Pact. (30 pp.)

Military details of dress, badges and equipment of arms and services of the C.E.F. for the use of the sculptor of the Canadian National War Memorial to be erected in Ottawa. (20 pp. and chart.)

Information concerning the crossing of the 1st Canadian Contingent and Escort, Quebec to Plymouth, October, 1914. (6 pp.)

Offers of service in the Great War, showing:—

(*a*) Units of the Canadian Militia and other bodies of troops which volunteered for active service.

(*b*) Gifts of money, food, and horses by the Dominion and Provincial Governments, organizations and individuals, and the supply of equipment, ordnance and various weapons of war.

Short histories of the undermentioned units of the Canadian Militia were prepared, and copies forwarded to the Regiments concerned:—

The Governor General's Body Guard.
1st Canadian Husars.
The Haldimand Rifles.
The Frontenac Regiment.
The Princess Louise Fusiliers.

The Annapolis Regiment.
The Royal Rifles of Canada.
The Edmonton Fusiliers.
The Canadian Fusiliers (City of London Regt.).
The 8 Field Ambulance C.A.M.C.

THE COMPILATION OF HISTORICAL DATA RELATING TO THE WAR FOR THE HISTORICAL SECTION (MILITARY BRANCH) COMMITTEE OF IMPERIAL DEFENCE, LONDON

Assistance was rendered to the British Historian by checking and selecting documents relating to the actions of St. Eloi Craters, 1916, and also concerning the Battles of Mount Sorrel and of the Somme, 1916: 225 folios, 7 maps and 7 aeroplane photographs were copied and forwarded.

Copies of the 1st draft, Volume V, British Official History, dealing with the actions of St. Eloi Craters and the Battle of Mount Sorrel, 1916, have been received from the British Historian and distributed to over 50 senior officers of the Canadian Corps for criticism and amendment.

SUPPLY OF INFORMATION TO HISTORICAL INVESTIGATORS AND THE FACILITATION OF THEIR RESEARCHES

Many demands were made upon the section for historical information, which was furnished, including:—

Statement showing growth and composition of the Canadian Expeditionary Force.

Short biography of Marshal Foch.

Short biography of Colonel Sir Casimir Gzowski.

Preparation and elucidation of documents in connection with the Currie vs. Preston and Wilson Libel Action.

Particulars regarding locations, dispositions and activities of various units of the C.E.F. for the information of the Imperial War Graves Commission and the Canadian Board of Pension Commissioners.

A key to elements and a concise description of the historical carving in the Memorial Chamber, Parliament Buildings, Ottawa, for the information of the Protective Staff, House of Commons: a course of lectures by the Director was attended by the guides responsible for explaining the significance of the Chamber to visitors.

(*b*) The Royal Canadian Air Force

The direction and control of aeronautics in Canada, both civil and military, come under the jurisdiction of the Department of National Defence. The powers and duties involved are exercised under the direction of the Minister by four separate branches of the Air Services, namely, the Directorate of Civil Government Air Operations, the Controller of Civil Aviation, the Aeronautical Engineering Division, and the Royal Canadian Air Force.

The first three of these branches are responsible directly to the Deputy Minister, and information regarding them may be found in the "Civil Aviation" section of this report, and also in the separate "Report on Civil Aviation, 1928," which can be obtained by application to the Secretary, Department of National Defence, Ottawa.

The Royal Canadian Air Force

The Royal Canadian Air Force is the Military Branch of the Air Services. The Chief of the General Staff, through the Director, R.C.A.F., administers and controls all military air operations.

The Royal Canadian Air Force has the following composition:—

(*a*) The Active Air Force.
(*b*) The Reserve.

(a) *The Active Air Force*

The establishment of the Permanent Active Air Force of Canada consists of 176 officers and 641 Airmen permanently embodied for continuous service, and available for general service, including training and operations for civil government departments. The strength of the Royal Canadian Air Force was 131 officers and 590 Airmen on March 31, 1929. Out of this total about half were attached for duty with the other branches of the Air Services.

The Non-Permanent Active Air Force is comprised of such units or detachments and other formations as are from time to time named by the Governor in Council. At present there are authorized 67 Officers and 130 Airmen. The strength of the Non-Permanent Active Air Force is 46 Officers. These personnel are included in the strength of the Royal Canadian Air Force, shown above.

(b) *The Reserve*

The policy of the department is to create a large reserve list consisting of personnel qualified in the several branches of Air Force duties.

The Reserve will be inactive except for such special courses as may be authorized by the Honourable the Minister, though personnel on the Reserve will be liable to call for duty with the Active Air Force.

Headquarters, R.C.A.F.

R.C.A.F. Headquarters is organized as follows:—

Director, R.C.A.F.
Assistant Director, R.C.A.F.
Staff Officer Personnel.
Staff Officer Equipment.
Staff Officer Organization.
Staff Officer Training.
Staff Officer Operations and Intelligence.
Staff Officer Regulations.

R.C.A.F. Station, Vancouver

R.C.A.F. Station, Vancouver, B.C.—The station is well equipped in regard to hangars, shops, and slipways. Barrack accommodation and housing for the personnel are required.

R.C.A.F. duties:—

(1) Seaplane flying training for personnel of the R.C.A.F., and Civil Government Air Services (*ab initio*).
(2) Winter training—Officers and Airmen.
(3) Combined operations and training with Naval and Military Forces.

During 1928 *ab initio* seaplane training was carried out, at which 41 Officers and 15 N.C.O.'s attended, all of whom qualified as seaplane pilots.

R.C.A.F. Station, Camp Borden

The Air Station at Camp Borden carries out training of personnel for all the branches of the Air Service. During the fiscal year 1928-29 training was carried out as follows:—

(a) Refresher flying courses were given to 6 Permanent Officers and N.C.O. Pilots, and 29 Non-Permanent Officers.

(b) Training for Provisional Pilot Officers—Forty-three Provisional Pilot Officers underwent their first term *ab initio* flying training, thirty-two of whom passed their examinations at the completion of the term.

Eleven Provisional Pilot Officers attended for the second term of *ab initio* flying training, all of them successfully completing their second term.

Eight third term Provisional Pilot Officers attended, 7 of whom successfully passed their examinations upon the completion of the course and qualified as pilots. Four of the successful candidates were given further flying instruction and granted Non-Permanent Commissions in the R.C.A.F. It is expected that about three more of this term will be given commissions in the near future.

(*c*) Eight Commercial Pilots received flying training and they all passed their tests.

(*d*) An N.C.O. Pilots' Course was given, fourteen Airmen attending, ten of whom qualified as N.C.O. Pilots (*ab initio*).

(*e*) A Parachute Course was given, at which nineteen Officers and Airmen attended. All qualified.

(*f*) A Flying Instructors' Course was given, at which 15 Officers attended. These Officers were classified, or, in the case of former Instructors, reclassified, at the completion of the course.

(*g*) A Technical Training Course for boys was carried out, and 22 boys attended, all of whom qualified.

(*h*) Thirty-two Flying Club Instructors received a Flying Instructors' Course, twenty-six of whom qualified.

R.C.A.F. Training—Generally

R.C.A.F. training may be divided into two categories: training for Officers, and for Airmen.

The training for Officers and Airmen at Vancouver and Camp Borden during the year has been most successful, both as regards service personnel and those attached to other Government Air Services.

R.C.A.F. Officers have been attached for courses of instruction at the Royal Military College, Kingston, and elsewhere throughout the country.

Officers of the Royal Canadian Air Force attached for training with the Royal Air Force in England:—

	Officers Attending
(*a*) Royal Air Force Staff College, Andover	2
(*b*) Flying Instructors' Course—Central Flying School, Wittering	1
(*c*) Navigation, at Royal Air Force School of Air Pilotage	1
(*d*) Army Co-operation, at Old Sarum, Salisbury	1
(*e*) Armament Course, Eastchurch	1
(*f*) Aeronautical Engineering, Imperial College of Science	1
(*g*) War Staff Course—Royal Naval Staff College, Greenwich	1

Provisional Pilot Officers' Training

The idea underlying the present scheme of the R.C.A.F. Provisional Pilot Officers' training is to obtain, with the minimum of expense, a class of young officer having, in addition to his knowledge of flying, a thorough all-round education, with special qualifications on the technical side. With this in view, arrangements have been made with the Canadian universities to accept for air force training a number of students in their first year from the Applied Science and Engineering faculties, and train them at Camp Borden during the summer vacations each year of their university course. A satisfactory response has been made, and numbers greatly in excess of the vacancies apply each year. A number of Gentlemen Cadets from the Royal Military College are accepted each year in the same way. The scheme of training is shown in a pamphlet issued on the subject, which can be obtained by application to the Secretary, Department of National Defence, Ottawa.

Training for Airmen

Technical Training of Boys and Airmen at Camp Borden.

This scheme of training was approved on November 5, 1925, and was inaugurated on July 4, 1927. During the fiscal year 1928-29, 22 boys from all parts of Canada reported at R.C.A.F. Station, Camp Borden, for two months'

training. In order to make available a supply of well-trained air mechanics for Civil Aviation it is intended to increase the numbers attending this course. A pamphlet containing information regarding the plan of training for airmen is available and can be obtained on application to the Secretary, Department of National Defence, Ottawa.

Combined Operations with the Naval and Military Forces

Seven operations were carried out in conjunction with the military forces, consisting of reconnaissance flights, transportation, and tactical exercises, with a total of 126 hours' flying time. One operation of twenty-three hours' duration was carried out in conjunction with H.M.C.S. *Vancouver*.

SUMMARY OF FLYING—1928-29

—	Hours	Minutes
Aerial Photographs for Geographical Section, General Staff	134	55
R.C.A.F. transportation	123	55
Service and instructional flying	6,380	30
Miscellaneous	154	25
Totals	6,793	45

REPORT OF THE ADJUTANT-GENERAL

(1) Organization

(A) Permanent Active Militia

The vote for the fiscal year 1928-29 allowed of only slight changes in the establishments as indicated under the heading "Establishment and Strength."

Recruiting

On April 1, 1928, the strength in warrant officers, non-commissioned officers and men was 3,175.

During the year there were 464 enlistments and 787 discharges.

On March 31, 1929, the strength in warrant officers, non-commissioned officers and men was 2,852.

Establishment and Strength

The following table shows the Peace Establishment, Limited Establishment, and actual strength of units of the Permanent Active Militia, on March 31, 1929:—

PERMANENT ACTIVE MILITIA

Unit	Authorized Establishment			Limited Establishment					
				Staff Vote	P.F. Vote		Other Votes		Total All Votes
	O.	O.R.	Total	O.	O.	O.R.	O.	O.R.	All Ranks
Staff and General List..	20	.....	20	19	1	.....	.....	.....	20
R.C.D.	24	415	439	3	15	210	1	.....	229
L.S.H. (R.C.)	24	415	439	2	15	162	2	.....	181
R.C.A.	64	1,004	1,104	4	51	616	6	36	713
R.C.E.	51	357	408	3	32	220	6	20	281
R.C. Sigs.	46	396	442	.....	15	79	13	105	212
R.C.R.	34	749	783	6	28	385	3	3	425
P.P.C.L.I.	34	739	773	6	25	227	2	2	262
R. 22e R.	34	739	773	2	15	160	2	.....	179
R.C.A.S.C.	33	412	445	1	27	245	.....	1	274
R.C.A.M.C.	38	108	146	1	30	89	2	7	129
R.C.O.C.	39	688	727	1	36	430	3	4	474
R.C.A.V.C.	12	38	50	.....	6	12	.....	.....	18
R.C.A.P.C.	25	100	125	1	19	66	.....	2	88
C.M.S.C.	9	202	211	.....	8	170	2	8	188
C.S.A.S.	6	5	11	.....	4	2	1	.....	7
Per. Cadet Staff.....	6	.....	6	.....	.....	.....	6	.....	6
Total.....	499	6,403	6,902	49	327	3,073	49	188	3,686

PERMANENT ACTIVE MILITIA—*Concluded*

Unit	Actual Strength					
	Staff Vote	P.F. Vote		Other Votes		Total All Votes
	O.	O.	O.R.	O.	O.R.	All Ranks
Staff and General List	19	1	.....	.....	.....	20
R.C.D	3	14	195	2	.....	214
L.S.H. (R.C.)	2	14	133	1	.....	150
R.C.A	4	50	540	5	34	633
R.C.E	3	33	185	6	17	244
R.C. Sigs	.....	15	72	9	103	199
R.C.R	6	26	306	3	3	344
P.P.C.L.I	6	22	168	5	1	202
R. 22e R	2	13	127	3	.....	145
R.C.A.S.C	1	26	212	.....	1	240
R.C.A.M.C	1	28	83	3	6	121
R.C.O.C	1	35	411	3	2	452
R.C.A.V.C	.....	6	10	.....	.....	16
R.C.A.P.C	1	19	65	.....	3	88
C.M.S.C	.....	8	163	2	10	183
C.S.A.S	.....	5	2	.....	.....	7
Per Cadet Staff	.....	.....	.....	6	.....	6
Total	49	315	2,672	48	180	3,264

Revised Peace Establishments have been authorized.

The rank of Brigadier has been introduced in substitution for the ranks of Colonel Commandant and Colonel-on-the-Staff, in conformity to similar changes made in the British Army.

Organization

The Royal Canadian Army Medical Corps School of Instruction at Ottawa, and Branch Schools thereof at the following centres have been authorized:—

London, Ont.
Toronto, Ont.
Kingston, Ont.
St. Johns, P.Q.
Quebec, P.Q.
Halifax, N.S.
Winnipeg, Man.
Esquimalt, B.C.
Calgary, Alta.

Nomenclature

The Royal 22nd Regiment has been redesignated "Royal 22e Regiment."

Alliances

His Majesty the King has authorized the alliance of The Royal Canadian Army Pay Corps to The Royal Army Pay Corps of the British Army.

(B) NON-PERMANENT ACTIVE MILITIA

Organization

The following changes in organization have been authorized:—

Cavalry—

The 10th Queen's Own Canadian Hussars disbanded at Quebec, P.Q., in 1913, has been reconstituted under the designation "The Queen's Own Canadian Hussars" and located at Quebec, P.Q.

Artillery—

The 25th and 51st Field Batteries, 1st Field Brigade, C.A., at Ottawa, Ont., have been authorized to organize.

Signals—

The 4th Signal Battalion at Montreal, P.Q., has been organized.

Corps of Guides—

The Corps of Guides has been disbanded. Being well suited for service in Engineer and Signal Units, the personnel have, as far as possible, been absorbed by local units of the services mentioned. Officers not so transferred have been posted to the Reserve of Officers.

Canadian Officers' Training Corps—

The University of New Brunswick Contingent has been increased from one company to a battalion headquarters and two companies.

Infantry—

The North Waterloo Regiment has been converted into a Scottish unit and designated "The Scots Fusiliers of Canada."

The 3rd (Reserve) Battalion (220th Bn., C.E.F.), of The York Rangers has been authorized.

Medical—

The following active units of the Canadian Army Medical Corps have been converted into "Reserve" units:—

All Casualty Clearing Stations.
Nos. 6 and 7 General Hospitals.
All Stationary Hospitals.
All Motor Ambulance Convoys.
Mobile Laboratory.
X-Ray unit.
Base Depot Medical Stores.
Advance Depot Medical Stores.

No. 30 Field Ambulance, C.A.M.C., at Quebec, P.Q., has been authorized to organize.

Veterinary—

Mobile Veterinary Sections and Cavalry Mobile Veterinary Sections of the Canadian Army Veterinary Corps have been converted into "Reserve" units.

Reserve Regimental Depots—

The organization of Reserve Regimental Depots as units of the Non-Permanent Active Militia has been restricted to a Reserve Regimental Depot for each regiment of cavalry (or mounted rifles) and regiment of infantry. Strength is restricted to the posting of officers.

Peace Establishments

The Peace Establishments of the Non-Permanent Active Militia remain practically unchanged.

Nomenclature

The following regiments have been redesignated as stated:—

Old Title	*New Title*
The British Columbia Mounted Rifles.	The British Columbia Dragoons.
The Norfolk Rifles.	The Norfolk Regiment of Canada.
The Algonquin Rifles.	The Algonquin Regiment.

Localization

The localization of units has been changed from time to time to suit the conditions and population of the country.

Alliances

During the past year, His Majesty the King has granted authority for several units to be allied with regiments of the British Army, as follows:—

Regiment	*Regiment of the British Army with which Allied*
2nd Dragoons.	The Royal Scots Greys (2nd Dragoons).
14th Canadian Light Horse.	14th/20th Hussars.
The New Brunswick Dragoons.	The Royal Scots Greys (2nd Dragoons).
The Prince Edward Island Light Horse.	9th Queen's Royal Lancers.
78th Field Battery, C.A.	78th Field Battery, R.A.
The Lanark and Renfrew Scottish Regiment.	The Black Watch (Royal Highlanders).
The Ontario Regiment.	The Welsh Regiment.
The Lincoln and Welland Regiment.	The Royal Berkshire Regiment (Princess Charlotte of Wales's).
The Norfolk Regiment of Canada.	The Norfolk Regiment.
The Scots Fusiliers of Canada.	The Royal Scots Fusiliers.
The Northumberland Regiment.	The Northumberland Fusiliers.
The Queen's Rangers, 1st American Regiment.	The Queen's Royal Regiment (West Surrey).

Perpetuations

The 32nd Battalion of the Canadian Expeditionary Force is now perpetuated by the 1st Regiment, 12th Manitoba Dragoons.

Discipline

The discipline of the Permanent and Non-Permanent Active Militia during the past year has been satisfactory. The number of convictions by district court-martial for the year was 48.

Dental Treatment

Dental treatment has been satisfactorily carried out to ensure dental fitness of the Permanent Active Militia. In the case of the Non-Permanent Active Militia, dental treatment to the limited extent provided for under the regulations has been effected.

Regimental Facings

Regimental Facings of the colours stated hereunder have been authorized for the following units:—

"Blue"—The Essex Scottish.
"Yellow"—The Argyll and Sutherland Highlanders of Canada (Princess Louise's).
"Buff"—The Seaforth Highlanders of Canada.

(2) Personal Services

During the year under report the recommendations received at National Defence Headquarters in connection with the appointments, promotions, transfers, etc., of officers, indicated that the interest taken by senior officers of the various military formations throughout the Dominion, in keeping the officer personnel of their respective units well up to establishments laid down for the various arms, has been generally well maintained. The supply of young and suitable officers appointed to commissions throughout the year has been well up to the required standard, and many such appointments have been made from the Canadian Officers' Training Corps organizations connected with our Canadian universities. These professional gentlemen come to Active Militia units already well qualified for their commissioned ranks, and the number applying for commissions from this desirable source is apparently increasing annually, and the results may be considered as very satisfactory.

Combined with the promotions which have taken place in ordinary course in Active Militia units, and the influx of new officers, the number of qualified and trained officers who have passed to Reserve formations has been adequate, and the officer personnel necessary for the establishments of Reserve units is thus being completed. There has been considerable improvement in this regard in comparison with former years.

The following is a statement showing the number of changes in the command of units, which have been carried into effect during the year:—

O.C. Brigades (Cavalry and Infantry)	11
O.C. Cavalry, Artillery and Infantry units	45
O.C. Divisional Engineers	1
O.C. Signal Battalions	1
O.C. General and Stationary Hospitals	3
O.C. Divisional Trains	2
O.C. Reserve Brigades	2
O.C. Reserve Regiments	24
O.C. Reserve Signal Battalions	1
O.C. Reserve Divisional Trains	2

The number of officers (inclusive of provisional appointments) appointed during the year ended March 31, 1929, totalled 1,018.

Appointments and Retirements, Permanent Active Militia

The appointments to the Permanent Active Militia for the year totalled eleven, while during the same period nine resignations and retirements were gazetted.

Document Commissions and Warrants

Seven hundred and ninety-nine Document Commissions were issued to qualified officers following their appointment, also forty-eight Warrants to Non-Commissioned Officers, who were qualified, and received promotion to Warrant Rank.

List of Officers, Militia Service and Air Service

A revised Part I of the List of Officers, Militia Service and Air Service, corrected to July 1, 1928, was issued in October last, and a further revised edition of this publication is now necessary, and will be made available in the near future.

The current Part II issue, which was produced in December, 1927, has also been kept under revision and a further issue of this volume will be made toward the end of the calendar year.

(3) Medical

The work of this Directorate has been much the same as previously.

Owing to the rapid expansion of the Civil Aviation Branch, there has been a large extension of the facilities for the medical examination of candidates for pilots' licenses throughout Canada. Courses of instruction and numerous lectures have been given in all the principal cities and special equipment is being provided in each Military District.

The Medical Services of the Royal Canadian Navy at Halifax and Esquimalt have been placed under the District Medical Officer and full-time R.C.A.M.C. Medical Officers posted for duty with the R.C.N. at both Naval Stations.

The usual special arrangements were provided for detachments of the Royal Canadian Air Force and Royal Canadian Corps of Signals stationed at Lake du Bonnet, Ladder Lake, Norway House, Fort Smith, Aklavik, Dawson, Mayo and Fort Simpson.

One officer of the R.C.A.M.C. is at present in England, attached to the R.A.M.C. for instructional purposes.

The mobilization medical equipment has been checked and overhauled during the year and some progress has been made in bringing it in line with the equipment now used in Great Britain.

Twelve Field Ambulances trained at local headquarters and fourteen Field Ambulances and one Casualty Clearing Station trained in the field.

Health of the Troops

The health of the Permanent Force troops has been good throughout the year, but there was a noticeable increase in the incidence of influenza during the winter months.

The total number of patients treated in hospital during the year April 1, 1928, to March 31, 1929, was 3,316. This total was made up as follows:—

Royal Military College	309
Permanent Force	1,936
Non-Permanent Active Militia	321
Royal Canadian Air Force	340
Royal Canadian Navy	347
Royal Navy	57
Royal Australian Navy	2
Civilians	4
	3,316

An increase of 434 in the number of patients treated over the previous year. There were twenty-three deaths during the year, as follows:—

Angina pectoris	(P.F.)	1
Rheumatic fever	"	1
Endocarditis	"	1
Cerebral haemorrhage	"	1
Pulmonary tuberculosis	"	2
Appendicitis	"	1
Acute nephritis	"	1
Fleurisy and pneumonia	"	1
Effects of lightning	"	1
Injuries from train wreck	"	2
Carbon monoxide poisoning	"	1
General peritonitis	(R.C.A.F.)	1
Infection middle ear	"	1
Pneumonia	"	1
Aeroplane crashes	"	3
Drowning	"	1
Effects of lightning	(N.P.A.M.)	2
Drowning	"	1
		23

Seven thousand and ninety-nine Medical Boards were held during the year.

St. John Ambulance Association

There was an increase in the number of First Aid Classes held during the year and 367 awards were made. The award of a District Shield has stimulated competition and simplified the work of the examiner. Of the teams winning District Trophies, that from No. 3 Detachment, R.C.A.M.C., Kingston, Ont., was awarded the Mary Otter Trophy.

(4) Pay Services

The work in connection with the Pay Services of the Permanent and Non-Permanent Active Militia, and the Royal Canadian Air Force, including the payment of troops and accounts for supplies, maintenance, repairs, construction, etc., and the keeping of accounts in the various Military Districts, is carried out by small detachments of the R.C.A.P.C. at National Defence Headquarters and at the Headquarters of each Military District.

The strength of the Royal Canadian Army Pay Corps at present consists of twenty officers and sixty-eight other ranks, two of the latter being detached for duty at the Royal Military College.

Paylists for all Permanent Active Militia and Royal Canadian Air Force personnel in the various districts are compiled in the District Pay Offices. The pay of members of the Non-Permanent Active Militia in respect of annual training is also issued by the District Pay Offices, which are also responsible for the issue of other allowances authorized for units of the N.P.A.M.—e.g., allowances for command pay and drill instruction, care of arms, clothing and equipment, and for books, postage and stationery. These latter allowances are paid annually after the yearly inspections have been carried out by District Officers Commanding, and recovery of any deficiencies of stores, etc., has been effected therefrom.

The Paymaster, National Defence Headquarters, is responsible for the disbursements on claims received from ex-members of the Canadian Expeditionary Force, or their dependents, in regard to adjustments of Pay, Separation Allowance, and War Service Gratuity, and also payments in liquidation of the estates of deceased members of that force. It may be stated that such claims involve a considerable amount of research work, necessitating reference to the individual's personal documents, separation allowance records, and unit paylists over extended periods. As a matter of interest, however, it may be pointed out that there is not a single known instance in which a payment made during the soldier's service has been in dispute that the department has not been in a position to furnish a supporting voucher for the payment so made. During the year under review the following amounts were paid out of "Adjustments of War Claims" Vote, in respect of claims coming under the headings mentioned:—

Pay and Allowances	$ 3,432 17
Separation Allowance	14,864 55
War Service Gratuity	14,198 86
Total	$ 32,495 58

The undermentioned financial statements, comprising appendix "B", cover the fiscal year ending March 31, 1929, and show the expenditure on account of Pay and Allowances for the Permanent Active Militia and the Royal Canadian Air Force:—

I. Statement of expenditures by Stations on account of pay and allowances of the Permanent Active Militia for the fiscal year 1928-29.

II. Statement of expenditure by Districts on account of pay and allowances of the Royal Canadian Air Force for the fiscal year 1928-29.

(5) Records

During the fiscal year ended March 31, 1929, the personnel of the directorate was reduced by three. The rearrangement of the space for staff and the adjustment of office material and equipment has facilitated the work, and the general output compares most favourably with that of previous years.

Document Section

In order to reply to inquiries of every description received by the directorate, it was necessary during the year to examine and refile 321,315 sets of documents. These inquiries contained applications for the compilation of Honour Rolls and Memorials for public and private organizations, requests from Government departments and the general public, also requests for the replacement of Records of Service and Certificates of Service for officers and other ranks.

Through information obtained by the Hollerith system, progress was made on the Book of Remembrance, many statistical tables were compiled and current statistical information was readily furnished.

Registration work included requisitions for and refiling of 72,418 files; 34,511 loose papers and correspondence were received and 53,194 letters and parcels despatched from the directorate.

Researches, in connection with pay questions, of pay lists, part two Daily Orders, cheques, sundry ledgers and vouchers accounted for 50 per cent of the work in the Voucher Library. Good progress was made towards assembling and rearranging pay lists and vouchers received from Military Districts.

Graves Registration

Eight hundred and forty-four Cemetery Registers and 6,733 Registers of the Menin Gate Memorial were despatched to the next-of-kin.

The compilation of Rolls for the Memorial at Vimy was proceeded with, the blue-prints for the panels being checked as received from the draftsman. Notifications of death, in Canada, of 1,770 ex-soldiers were received; information concerning 624 graves was placed on record and arrangements made for marking and placing Memorials over the graves. Considerable research work was carried out in connection with recovered bodies from the battle areas, and in thirty-five cases successful identification was made.

Honours and Awards

The number of Memorial Plaques and Scrolls and Memorial Crosses issued was approximately the same as in 1927-28. Applications for replacement of lost medals continue to increase. The inquiries received from the general public regarding medals and awards were 25 per cent more than during the previous year.

Applications for the award of the Long Service and Good Conduct Medal (Permanent Active Militia) and the Colonial Auxiliary Forces Officers' Decoration and Long Service Medal (Non-Permanent Active Militia) were practically the same as for the last fiscal year.

Under the amended policy restricting the award of the Meritorious Service Medal to pensioners of the Permanent Active Militia, twelve medals were issued and a large number of candidates were registered for this award.

Medal Application Cards recently forwarded to addresses given by personnel on discharge from the Canadian Expeditionary Force are being returned, properly completed, from all parts of the world, and consequently progress has been made in the issue of British War and Victory Medals.

Estates

New estates numbering 179 were referred to the directorate with funds amounting to $15,611.59; 221 estates amounting to $23,930.68 were finally disposed of.

With the concurrence of this department, the Department of Pensions and National Health decided that the provincial authorities concerned should take over the adjustment of estates of ex-soldiers dying on the strength of the various units of the Department of Pensions and National Health. Consequently, since September, 1928, that department has discontinued the former practice of passing to the Directorate of Records any balances of pay and allowances. The decisions of the directorate, however, are still sought with regard to the disposal of personal effects and cash contained therein.

On March 31, 1929, approximately 720 estates, amounting to $124,034.72, remained for distribution; 118 shares amounting to $16,563.54, including interest to date, were held in trust.

During the year, thirty-three children attained the age of 15 and received payments held in trust for them. Disbursements in this connection amounted to $4,333.08.

(6) Extracts From Report of the Commandant Royal Military College of Canada for the Year Ending June 19, 1929

The College closed for the term 1927-28 on June 20, 1928.

Strength

Recruits joined on August 30th, 1928	50
First Class returned	34
Second Class returned	44
Third Class returned	54
Fourth Class returned	16
Of this number two were discharged, and four recruits on the waiting list were taken on strength	2
Strength at beginning of term	200

Distribution of Cadets by Provinces

The distribution of Gentlemen Cadets by provinces at the beginning of the term 1928-29 were:—

Ontario	96
Quebec	47
British Columbia	24
New Brunswick	9
Nova Scotia	6
Manitoba	5
Saskatchewan	5
Alberta	4
Abroad	4

Educational

(*a*) *Results.*—Of the 34 Gentlemen Cadets comprising the 1st Class, 6 graduated with honours, 20 have completed graduation, 8 will be required to write one or two supplementary examinations.

In the 2nd Class, 22 Gentlemen Cadets have passed, 18 require supplementary examinations and 2 have failed.

In the 3rd Class, 23 have passed and 29 require supplementaries.

In the 4th Class, 28 Gentlemen Cadets have passed, 18 require supplementaries and 17 have failed.

(*b*) *Progress.*—The instructional staff, both superior and subordinate, has worked competently and effectively throughout the year and it is very gratifying to be able to report that the co-operation and co-ordination of the members of the staff in the various departments has continued to improve. The progress made by the various classes, considering the college as a whole, has been average.

Commissions

The following commissions have been applied for by Gentlemen Cadets:—

Regular Army	Nil.
Canadian Permanent Force—	
Royal Canadian Artillery	1
Royal Canadian Corps of Signals	2
Royal Canadian Air Force	1

Discipline

The discipline throughout the year has been satisfactory.

Medical

The health of the Gentlemen Cadets during the period covered by this report has been very good.

Accommodation

The new Mechanical Laboratory has been in use throughout the year, and has resulted in a great improvement in the quantity and quality of the laboratory work covered by the 1st, 2nd and 3rd Classes. The building has proved entirely satisfactory, and only a few minor additions to equipment are contemplated for next year.

The situation as regards accommodation is unchanged since last year's report. This question was thoroughly investigated by the Advisory Board in June last, and in consequence of its recommendation, a Select Committee was appointed to take up the question of increasing accommodation at R.M.C. and to consider the priority of buildings and their essential details. This committee sat at the Royal Military College on November 28 and 29, 1928, and again in Ottawa on March 14, 1929.

Riding Establishment

The standards obtained in equitation in the various classes are up to the average.

It has been recommended that riding be discontinued in the 4th Class and that an adjustment of hours be made to allow of the time devoted to this subject to be added to the 1st and 2nd Classes.

Administration

(*a*) *Messing.*—The standard of the Gentlemen Cadets' messing has been improved without adding to the cost. The messing is now very much better in all respects than ever before.

(*b*) *Kitchen Equipment.*—Several major improvements have been made in the kitchen equipment. Frigidaire system has been installed.

(*c*) *Clothing.*—The quality of the clothing has been maintained, and, owing to the extra seamstress taken on at the beginning of the year, repairs and replacements have been kept up to date. The Tailor Shop is more than self-supporting, and it is hoped that a further slight reduction in costs to Cadets may be effected during the next year.

Grounds and Buildings

(*a*) *General Repairs to Buildings.*—The buildings have all been kept in a good state of repair. Periodical repairs and painting have been carried out.

(b) *Water Supply.*—A new pump and motor was installed to take care of the increased water consumption. The quality of water after treatment and purification has been good, and the weekly tests by the Health Department show the water supply to be pure.

(*c*) *Roads.*—Provision is being made for all roads to be kept in good condition.

(*d*) *Boundary Fences and Walls.*—These have been maintained in good condition.

(*e*) *Dormitory Buildings.*—The interior and exterior painting of the H.M.S. Stone Frigate dormitory was carried out. Flushmeters were also installed to all water closets in this building. Fort Frederick dormitory is in a good state of repair.

(*f*) *Drafting Room.*—The old machinery hall in the basement of the Educational building under the Sir Arthur Currie Hall was converted into a drafting room, allowing for one hundred drafting tables, each with individual light.

(*g*) *Grounds.*—The grounds have been well maintained.

General Staff

In addition to instructions given to the Gentlemen Cadets, the General Staff Branch of the Royal Military College has conducted the following courses this year as well as the preparation of precis for, and examination of, papers of the Militia Staff Course:—

i. Staff College Preparatory Course.
ii. Refresher Course.
iii. Long Course.

(*b*) This staff has also prepared the examination papers for promotion of Lieutenant-Colonels of the Non-Permanent Active Militia.

(*c*) *Staff College Preparatory Course.*—This course commenced on October 1, 1928, and terminated with the examinations in the middle of February, 1929. Five officers of the Permanent Force attended.

(*d*) *Refresher Course.*—This course ran concurrently with the Staff College Preparatory Course from October to Christmas.

Two officers of the Royal Canadian Air Force attended this course.

(*e*) *Long Course.*—This course commenced on February 18 and terminated at the end of May.

Competitions with Empire Institutions

(*a*) *R.M.C. Kingston vs. R.M.C. Sandhurst, Rifle and Revolver.*—The annual rifle and revolver match with the Royal Military College, Sandhurst, which was fired in June, 1928, resulted in divided honours, R.M.C. Sandhurst winning the rifle match, and R.M.C. Kingston winning the revolver match.

(*b*) *Lafferty Cup.*—This year the Lafferty Cup was won by the Royal Military College of Australia, the Royal Military College, Sandhurst, was second, the Royal Military College of Canada, third, and the Royal Military Academy, Woolwich, fourth.

The Royal Air Force Cadet College, Cranwell, has now been admitted to this competition.

Sports

The college sports are organized with a view to affording as many Cadets as possible recreation and amusement.

Transport

The transport of the college is in fairly good condition. Replacements will be made during the early fall.

Toronto Garrison Military Tournament, 1929

A party of 80 Gentlemen Cadets took part in the Toronto Garrison Military Tournament on May 22-25, 1929.

Presentations

(*a*) *Silver Cup.*—A Silver Cup has been presented to the college for Company Championship in Field Sports, by Colonel E. G. M. Cape, D.S.O., commanding the 2nd Montreal Regiment, C.A., and President of the Canadian Artillery Association. The cup will be known as "The Artillery Cup."

(*b*) *Books.*—A number of very fine volumes by Canadian authors have been presented to the college by the Quebec Government.

(*c*) *Coins.*—Two "Cook" coins and stand have been received from Mr. C. D. D. Stanley (Ex-Cadet No. 1146). These coins are of a special limited issue, stamped by the United States Government to commemorate Captain Cook's discovery of the Hawaiian Islands, and were distributed at the Captain Cook Sesquicentennial Celebration

(*d*) *Old Prints.*—Mr. J. B. Walkem, K.C., LL.D. of Kingston, has presented the college with several old plans and sketches of the Royal Military College peninsula and adjacent land.

(e) Dinghies.—The late Lieutenant-Colonel W. A. Hamilton (Ex-Cadet No. 208) donated $100 towards the purchase of a dinghy.

The Toronto Branch of the Royal Military College Club of Canada has presented the college with a cheque for $150 towards the purchase of a dinghy.

(f) Tennis Court.—Brigadier-General C. L. Hervey, D.S.O., has very kindly offered a full sized hard tennis court to the Royal Military College. This offer has been accepted and work on the grounds between the main buildings and the Mechanical Laboratory, the site selected for the court, is now being done.

Dr. J. T. Rogers of Hamilton, Ont., has kindly donated $150 towards the new tennis court.

Visitors

During the past year the college has been visited by the following:—

His Excellency, the Rt. Hon. The Viscount Willingdon, G.C.S.I., G.C.M.G., G.C.I.E., G.B.E., Governor General of Canada.
Her Excellency, Lady Willingdon, C.I., G.B.E.
Lieut.-Colonel H. W. Snow, C.M.G., D.S.O.
Lieut.-Colonel Rev. Canon J. M. Almond, C.M.G., C.B.E.
Brigadier-General G. H. Ralston, D.S.O.
Members of the Choir of the Cathedral of Sherbrooke.
Major-General H. A. Panet, C.B., C.M.G., D.S.O.
Lieutenant-General Sir A. C. Macdonell, K.C.B., C.M.G., D.S.O.
Dr. A. T. DeLury, M.A., F.R.S.C. Dean of Faculty of Arts, Toronto University.
Major-General H. C. Thacker, C.B., C.M.G., D.S.O.
F. H. Peters, Esq., Surveyor General of Canada.
Lieut.-Colonel C. B. Hodges, Commandant of Cadets, United States Military Academy, West Point, N.Y.
United States Military Academy Hockey Team.
Members of the Royal Arch Masons.
C. H. Payne, Esq., Director, Commercial Intelligence Service, Ottawa.
Professor (Captain late R.A.) R. De La Bore, M.A., Professor of English and History, Royal Air Force Cadet College, Cranwell, England.
Major H. G. Eady, M.C., R.E., Staff, Directorate of Military Operations, War Office, London.

Closing Exercises

The closing exercises were held on June 17, 1929, among those present were:—

Colonel Hon. J. L. Ralston, C.M.G., D.S.O., K.C., M.P., Minister of National Defence.
Major-General A. G. L. McNaughton, C.M.G., D.S.O., Chief of the General Staff.
Major-General H. A. Panet, C.B., C.M.G., D.S.O., Adjutant-General.
Major-General Sir Hugh J. Elles, K.C.M.G., C.B., D.S.O. (Late Royal Engineers).

The Honourable the Minister of National Defence inspected the Cadet Battalion and presented Diplomas to members of the Graduating Class.

Major-General H. A. Panet, C.B., C.M.G., D.S.O., presented the prizes.

June Ball

The June Ball was held on the evening of June 17. This function was largely attended and was successful in every way.

Closing Date

The college closed for the term 1928-29, at 12 noon on Wednesday, June 19, 1929.

REPORT OF THE QUARTERMASTER GENERAL

The Engineer, Supply and Transport, and Equipment and Ordnance Services have been maintained throughout the year at as high a standard as possible on the funds provided.

With the exception of Engineer Services, where a few improvements have been possible, all funds have been required to maintain present equipment in a satisfactory condition and to replace articles which have been worn out.

Engineer Services and Works

Attached hereto will be found a report of the work carried out during the year by this directorate. Buildings and works are now in a more satisfactory condition.

The conditions regarding Permanent Force barracks mentioned in previous reports, still exist. New barracks are required to be erected in Military District No. 2 within the next three years when the present arrangement with the city of Toronto regarding Stanley Barracks expires. The old barracks now occupied are entirely unsuitable and it is extremely difficult to maintain an efficient Permanent Force under existing conditions.

The cavalry unit stationed at this point has no available ground for training purposes. New buildings have been erected during the past year on the small piece of ground which had been provided by the city. The stable accommodation is unsuitable and is a severe fire risk.

Barracks are required for the Royal Canadian Corps of Signals now at Camp Borden in temporary buildings. It is not possible to keep a Permanent Force unit satisfied in this location and it is hoped that accommodation in new barracks in Toronto can be provided for them at an early date.

The Permanent Force in Calgary still occupy a portion of the Non-permanent armoury, an arrangement unsatisfactory to both forces.

The temporary stables rented from the city are unsuitable and a severe fire risk. A satisfactory state of affairs will never exist until new barracks and fireproof stables are erected.

The barrack situation in Halifax remains unchanged. Certain of the troops are quartered in unsanitary buildings. The cost of repairs and administration of this station is necessarily very high. Considerable progress has been made on the new magazine at Bedford Basin. The naval ammunition has now been moved into the new buildings. It is hoped that during the coming year the greater portion of the military ammunition will also be accommodated at that point.

The Petawawa magazine is now practically completed. The buildings have proven very satisfactory and have been erected at a minimum expenditure.

A few small buildings have been erected in the various camps, improving the accommodation there provided. It is hoped that during the coming year, further improvements may be carried out.

The new Air Force aerodrome at Rockcliffe has been further developed. Draining, grading and surfacing the aerodrome, construction of roads, the erection of a new hangar, provision of water supply and electric power have all been carried out during the past year.

Expenditures at Camp Borden have been kept down to a minimum as it is essential that the units occupying this station be moved to a more suitable point.

Work has been carried out at several outlying stations of the Royal Canadian Air Force in Western Canada.

It is considered advisable to continue the erection of light buildings for the accommodation of troops at the various central camps, replacing the use of canvas to as large an extent as possible. This policy will result in the long run in considerable financial saving to the department.

A detailed report of this service follows. (See page 56.)

Royal Canadian Army Service Corps

This Corps has functioned satisfactorily throughout the year. The distribution of rations and forage, control of all types of transport, allotment of buildings and provision of rented buildings, together with the supply and control of fuel, light, water, etc., have been carried out at a minimum of expense. The cost of the military ration has again increased due to the rise in cost of certain types of articles. The cost of forage, however, shows a slight decrease.

No difficulty has been experienced in obtaining suitable horses in Western Canada, but in certain parts of Eastern Canada the proper type of horse is still practically unobtainable. A large number of horses are purchased in Ontario for the United States yearly, higher prices than those offered by the department being paid for the better animals, making the supply of a better type of horse more difficult unless the amount at present authorized by the department for such purchases is increased.

The mechanical transport vehicles of the department have been well maintained and the mechanical knowledge of the members of the Transport branch is steadily improving.

One battery of artillery has, during the year, been furnished with mechanical six-wheeled tractors, which have been found very suitable for the purpose.

The Royal Canadian Army Service Corps Schools of Instruction have generally improved the training of all ranks. A very practical five months' course in mechanical engineering and workshop procedure was carried out at Toronto for a class of five officers and twenty other ranks.

A detailed report of this service follows. (See page 62.)

Equipment and Ordnance Services

The inspection of Ordnance Stores throughout Canada shows them to be in good condition. Fireproof buildings are, however, required at a number of stations.

Surplus and obsolete stores and clothing to the value of approximately $26,000 have been disposed of through the Government Salvage Officer by sale or transfer during the past year, bringing the total amount of stores disposed of by this department since the war to $10,301,478.54.

The department, in preparation for the general use of ·22 ammunition for indoor rifle shooting, is taking the necessary steps to provide new rifles for this purpose.

An order was placed during the past year for a certain amount of gun ammunition to replace ammunition expended for practice purposes yearly since the war. It will be necessary to continue this practice annually to prevent further depletion of necessary stock.

The supply of tentage throughout Canada is falling to the danger point. It will be necessary to consider whether issues on a rental basis to Boy Scouts and Girl Guides can be continued.

It is satisfactory to report that the annual loss of military equipment by Non-permanent units has now been considerably reduced.

The ammunition and other articles manufactured at the Dominion Arsenal, Quebec, have been carefully inspected and found of excellent standard. The amount of small arm ammunition now manufactured annually is practically equal to the annual expenditure on practices.

The work of the Chief Inspector of Ammunition and that of the Inspector of Armourers' Services has been well carried out.

A detailed report on Equipment and Ordnance Services follows. (See page 66.)

(1) Directorate of Engineer Services

Definition of Duties

Engineer Services comprise the design, construction and maintenance of fortifications, military buildings and works; also the custody of lands owned or used by the Department of National Defence. It is also the duty of the Royal Canadian Engineers to operate and maintain the defence electric lights (search-lights) and the telephone systems in permanent fortifications.

Staff

Under the Quartermaster-General, the Director of Engineer Services is responsible for the proper carrying out of all Engineer Services, and administers the sum voted by Parliament under the heading " Engineer Services and Works, Militia Services," and all Engineer Services for the Royal Canadian Air Force.

The Director of Engineer Services is assisted by a small staff at Headquarters, who are employed on inspection duties and the preparation and supervision of important constructional projects, as well as on ordinary administrative duties.

A District Engineer Officer is appointed in each Military District. He is responsible to the District Officer Commanding, for the proper execution of Engineer Services within his district. He has a staff of officers and other ranks of the Royal Canadian Engineers to assist him in the performance of his duties of design, supervision and administration; the size of the staff depending on the amount of work in each district.

Notes on Engineer Services Generally

The condition of buildings generally is fairly good. Considerably more money than has been made available could be advantageously spent upon them, but they are being maintained in a reasonably good state of preservation.

Rifle Ranges

The existing rifle ranges are being maintained in as good condition as funds permit. The lack of proper rifle range accommodation has been pointed out in previous reports and it is becoming more acute. The danger areas on many ranges are inadequate. This has necessitated closing several, and restricting others to short range firing. During the year only the following construction was carried out:—

Woodstock, N.B. (range completed).
Saskatoon, Sask. (construction commenced).
North Vancouver (site cleared).

Militia training is being seriously handicapped as a result of the lack of range accommodation, and funds will have to be provided for range construction if the situation is to be improved.

Accommodation, Permanent Active Militia

The situation regarding new barracks for the Permanent Active Militia remains unsatisfactory. Funds have not yet been provided to build the accommodation urgently required at Toronto and Halifax. Plans have been prepared for work to be carried out at Calgary, which will improve conditions there.

The stable accommodation for mounted corps is, in several cases, very poor, and constitutes a grave fire risk. At Winnipeg the artillery stables are in a dilapidated condition, and their upkeep is very expensive. New brick stables are urgently needed. Arrangements have been completed under which the condition of the stables at Calgary will be improved, but they should be replaced by a new fireproof building.

Accommodation, Non Permanent Active Militia

There is still a shortage of armoury accommodation, space for drill in inclement weather and storage facilities for several units of the Non-Permanent Active Militia. This condition makes organization difficult and seriously affects the efficiency of the units.

No funds have been provided for the erection of armouries, but the existing armouries have been maintained in a fairly good state of repair. The funds available are not sufficient to keep these buildings in really first-class condition.

Expenditures, 1928-29 (Militia Services)

ENGINEER EXPENDITURES CLASSIFIED UNDER VOTES

Engineer Services and Works

(A) Rifle ranges	$ 112,085 50
(B) Barracks	278,426 93
(C) Ordnance buildings	33,195 91
(D) Drill hall and armouries	151,486 84
(E) Camps and lands	145,979 11
(F) Fortifications	78,314 00
Total	$ 799,488 29

The distribution of expenditures on Engineer Service funds was as follows:—

Military District No. 1	$ 34,783 00
" " 2	66,533 00
" " 3	52,027 00
" " 4	74,485 00
" " 5	78,000 00
" " 6	15,299 00
" " 7	23,090 74
" " 10	57,036 89
" " 11	59,857 00
" " 12	15,743 75
" " 13	31,053 00
Halifax Garrison	164,231 00
Petawawa Camp	59,859 22
Connaught Rifle Range	50,481 96
Ottawa services	17,007 73
Total	$ 799,488 29

Engineer Expenditures from Other Appropriations

MANUFACTURING ESTABLISHMENTS

Dominion Arsenals, Lindsay and Quebec	$ 10,493 00

CONSTRUCTION OF MAGAZINES, HALIFAX

Continuation of program of construction of Joint Service Magazine, Halifax	99,785 00

ROYAL MILITARY COLLEGE

Repairs and maintenance	41,211 84

NON PERMANENT ACTIVE MILITIA

Temporary works in connection with camping arrangements, such as water supply, latrines, ablution tables, kitchens, incinerators, preparation of camp sites, etc	30,073 59

PERMANENT FORCE

Fire protection, water supply, chimney sweeping, etc	1,347 00

Work Carried Out, 1928-29

The following is a list of the more important services performed:—

Military District No. 1—	
London—	
Wolseley Barracks—	
Provision of playing field	$ 2,500 00
Extension to garage and remodelling of existing garage	2,348 00
Construction of new approach for traffic	1,363 00
Military District No. 2—	
Long Branch Rifle Range—Paint buildings	1,392 00
Long Branch Rifle Range—Repairs to well and pump station	1,114 00
Toronto—	
Stanley Barracks—Repairs to sash and frames	1,326 00
Armoury—Repair damage caused by fire	1,911 00
Armoury—Renew roof	6,250 00
Hamilton—	
Armoury—Interior painting	1,993 00
Armoury—Repair and repoint brickwork, etc	1,500 00
Niagara Falls Armoury—Repair brickwork	1,242,00
Camp Borden, R.C.C.S.—	
Conversion of building 85 to provide better accomodation for Q.M. Stores	2,200 00
Install steam boiler and connect radiation in buildings 84, 85 and 90	3,565 00
Construct boiler house	1,000 00
Military District No. 3—	
Kingston—	
Veterinary Hospital, new building for operating room and barrack room	2,300 00
D.O.Cs. quarters, rebuild chimney	1,000 00
Fort Henry, repairs to masonry	1,499 00
Brockville Armoury—Alterations to caretaker's quarters	1,000 00
Cobourg Armoury—Renew basement floors	2,123 00
Military District No. 4—	
St. Johns—	
The Barracks—O.Cs. stables, convert into sick lines	1,900 00
" Construction of forage barn	1,534 00
" Officers' Mess building, overhaul heating system	1,800 00
" Construction of new workshop building	10,480 00
" Officers' Mess building and A.S.C. Depot, refrigerators	2,000 00
" Redecorate married quarters	1,850 00
" Paint interior stables with acid proof paint	1,095 00
" Renovation of 8 married quarters, other ranks	3,800 00
" Renew floors and renovation caretaker's quarters	2,770 00
Draining, ploughing, etc., camp area	3,498 00
Montreal—	
Armoury—Provide accommodation for machine gun platoon	3,000 00
Drill Hall, Craig St.—Alterations and improvements, Officers' Mess, Artillery quarters	1,500 00
Sherbrooke Armoury—Provide accommodation for band and recreation room	1,527 00
Pointe aux Trembles Rifle Range—Repair firing point	1,000 00
Military District No. 5—	
Quebec—	
Rebuilding portion of Citadel Walls	5,310 00
Overhaul and repairs to heating systems	2,062 00
61 St. Louis St., pull down and rebuild wall	2,100 00
Drill Hall, provide Miniature rifle range	1,400 00
Dominion Arsenal, rebuild portion of walls	3,300 00
Little River Proof Butts—Repairs to heating	1,522 00

Military District No. 6	
Sydney, N.S.—Extensive repairs to armoury	1,322 00
Halifax, N.S.—	
South Barracks, remake parade ground	1,780 00
R.A. Park, recover gun shed roof	1,600 00
R.A. Park, R.S.A. offices and lecture room, provide hardwood floors	1,260 00
R.A. Park, Officers' Mess, increase pantry and heating accomodation	1,200 00
R.A. Park, Old H.Q. office, convert into single officers' quarters	3,150 00
Citadel, brick block, repairs to roof	1,300 00
Bellevue property, renovation and hardwood floors	5,800 00
Bellevue property, building, reconditioning	1,200 00
Sandwich Battery, increase water supply	1,640 00
Garrison Pier, complete bracing	1,430 00
J. S. Magazine, distribution of electric light power lines to buildings	1,468 00
Kings Wharf, renewal of north pier and construct landing stage	22,594 00
R.C.E. motor boat *Patricia* purchase of new engine	4,900 00
Garrison, games grounds, extension	2,000 00
Armouries—Renew heating system in basement	1,000 00
Military District No. 7	
Sussex, N.B.—Reconstruct Y.M.C.A. building on camp grounds	1,300 00
Newcastle, N.B.—Erection of vehicle shed	1,800 00
Woodstock, N.B.—Construction of rifle range	8,041 00
Military District No. 10—	
Winnipeg—	
F.O. Barracks, installation of modern electric fire alarm	1,033 00
Renovation of District H.Q. office	1,000 00
F.O. Barracks, redecoration of quarters and schools	3,000 00
F.O. Barracks, married quarters, structural alterations	1,841 00
Minto St. Armoury, repairs to plaster	1,000 00
Minto St. Armoury, provide accommodation for officers and sergeants	4,679 00
Military District No. 11—	
Esquimalt—	
Work Point Barracks, interior decoration of offices, barrack rooms, etc	1,754 00
Work Point Barracks, construction of recreation building	1,799 00
Work Point Barracks, construction of workshop and garage	2,399 00
Ordnance Depot, construct vehicle shed	6,280 00
Military cemetery, repair road	1,400 00
Vancouver—Beatty St. Drill Hall, renew roof covering	2,247 00
North Vancouver Rifle Range—Survey of site	2,260 00
North Vancouver Rifle Range—Site clearing and grubbing	12,500 00
Military District No. 12—	
Saskatoon Rifle Range—Construct 4-target rifle range (not completed)	3,500 00
Dundurn Camp—Provision of latrines, water supply, etc	4,999 00
Military District No. 13—	
Sarcee Camp—	
Road work	2,699 00
Construct new Ordnance wagon shed	1,175 00
Construct canteen building	4,031 00
Construct new Ordnance building	3,325 00
Petawawa Camp—	
Magazine Scheme	5,900 00
Erect O.M.E. shops	4,842 00
Alterations to A.S.C. compound	3,447 00
Provide recreation building and lecture room	6,499 00
Provide drying room and hot bath building	4,888 00
Erect Q.M. stores, cavalry	1,799 00
Royal Military College—	
Buildings generally—repointing walls	3,500 00
Administration building, retubing boilers	1,586 00
Re-appropriate draughting room	2,700 00
Automatic coal burner	2,492 00
Install refrigerating cabinets	3,050 00

Construction of Magazines, Halifax

The work carried out during the year under a general contract included, for Naval Services, three explosive stores, shell-wash building, proof building and yard, workshop, isolation magazine and inflammables store, and for the Land Services, one double shell store. The buildings common to both Services were: guard house, tram shed, pump house for fire protection and a garage.

An unclimbable chain-like fence was erected around the whole magazine area, the light railways and heating conduits were extended, and additional fire protection and heating apparatus was installed. Various improvements to the existing buildings were also carried out.

Royal Canadian Air Force

The amount of work carried out by this directorate for the Royal Canadian Air Force has been increasing yearly. During the fiscal year 1927-28 an amount of $130,928.78 was spent from R.C.A.F. funds on Engineer services and works. As may be seen from the table below, the amount spent during the year under review was $415,635.60, an increase of $284,706.82 over that for the preceding year. A great deal of work is required in planning, estimating for, and supervising the services performed:—

Expenditures, 1928-29 (R.C.A.F. Funds)

Ottawa, Rockliffe Aerodrome	$ 298,294 91
Ottawa, Shirley's Bay Air Station	3,072 13
Ottawa, Victoria Island Stores Depot	30,531 16
Camp Borden Air Station	44,793 00
Military District No. 6	295 00
Military District No. 10	29,549 00
Military District No. 11	5,355 00
Military District No. 13	3,745 40
Total	415,635 60

The following more important services were performed:—

Ottawa—Rockliffe Aerodrome, preparation of flying field, including clearing, draining, grading and surfacing	$ 71,899 00
Rockliffe Aerodrome, construction of roads	18,402 00
Rockliffe Aerodrome, provision of tractor and snow plough	8,900 00
Rockliffe Aerodrome, construction of concrete hangar	57,717 00
Rockliffe Aerodrome, central heating plant	11,500 00
Rockliffe Aerodrome, provide water supply, including well, pump and tank	15,520 00
Rockliffe Aerodrome, construction of garage	4,935 00
Rockliffe Aerodrome, construction of platform	4,250 00
Rockliffe Aerodrome, provide electric light power lines	4,141 00
Rockliffe Aerodrome, construction of slipway	10,870 00
Camp Borden—Resurfacing Aerodrome	1,495 00
Interior decoration of Building	1,000 00
Conversion of No. 3 Hangar into G.I.S.	4,900 00
Conversion of No. 6 Hangar into G.I.S.	2,300 00
Sheath No. 5 Hangar	1,100 00
Lac du Bonnet—Erection and sheathing of Bessonneau Hangar	6,406 00
Cormorant Lake—Erection and sheathing of Bessonneau Hangar	5,778 00
Erect new buildings and alter old	2,088 00
Ladder Lake—Installation of lighting plant	1,238 00

Lands

The following is a list of military properties disposed of during the fiscal year 1928-29:—

Navy Island.—Transferred to the control of the Department of the Interior by Order in Council, July 12, 1928.

Tory Hill, Ont., Drill Hall.—Site and building sold to R. H. Anderson for $300, June 22, 1928.

Sydney, N.S., Barrack Point.—3·5 acres transferred to the Department of Railways and Canals for right of way for spur railway, by Order in Council, February 25, 1929.

The following is a list of military properties acquired during the fiscal year 1928-29:—

Lac du Bonnet, Man.—Site for Royal Canadian Air Force Station, containing 35 acres, purchased for $1,400, May 1, 1928.

Quebec, Mount Hermon Cemetery.—Section G, containing 10,540 square feet, purchased for $4,000, October 30, 1928.

Moose Jaw, Sask. Rifle Range site.—625·9 acres purchased for $9,123.70, and 640 acres reserved by Department of the Interior by Order in Council, August 30, 1928.

Vancouver, B.C. Rifle Range site.—403 acres purchased from Corporation of the District of North Vancouver for $6,725; 64·5 acres purchased from various individuals for $2,009.45.

Rockcliffe, Ont. Aerodrome site.—Additional area comprising 22·41 acres, purchased from James A. Wallace for $15,011.30, July 3, 1928.

St. Hubert, P.Q. Aerodrome site.—715·09 arpents purchased for $143,747.56, November, 1927, to June, 1928.

ROYAL CANADIAN ENGINEERS

Duties

The Director of Engineer Services is also the Officer Administering the Corps of Royal Canadian Engineers. The duties of the Royal Canadian Engineers are:—

(*a*) To operate the defence electric lights, telephones and machinery of the fortresses of Canada.

(*b*) To instruct the Non-permanent Active Militia and Gentlemen Cadets of the Royal Military College in military engineering.

(*c*) To execute and supervise Engineer Services throughout Canada.

(*d*) Any other military duties which they may be called upon to perform.

The Officer Administering, Royal Canadian Engineers and District Engineer Officers, in their respective spheres, give advice on technical matters connected with the organization and training of the Engineers of the Active Militia. District Engineer Officers in most cases act as instructors in military engineering at the various Provisional and Camp Schools held for the training and qualification of the personnel of the Active Militia Engineer units.

Officers

The present officer strength of the Corps is 33. Of this number, four are "On Command"—one as Assistant Director of Military Intelligence; one at the Staff College, Quetta, India; one as Assistant Director, Geographical Section; and one at McGill University.

Although there are at present no vacancies for subaltern officers, owing to the limited establishment having been reduced, more officers are urgently needed to carry out Engineer Services and the necessary training.

Other Ranks

The present strength of W.Os, N.C.O.s and Sappers is 185, or 35 under the authorized limited establishment. This is due to the fact that opportunities exist in the building and construction trades for men who have the necessary high qualifications required of recruits for the Royal Canadian Engineers. Also, the restrictions on enlistment have made it impossible to recruit up to strength.

It is becoming increasingly difficult to find suitable men for training as draughtsmen or military foremen of works. Men of the proper type are not anxious to enlist as long as they can earn better wages in civil employ.

Training

The functions of the Royal Canadian School of Military Engineering are:—

(*a*) To provide instruction for officers and other ranks of the Royal Canadian Engineers in their duties, and by examinations, to determine whether they possess the requisite technical qualifications for promotion, or for certain special appointments.

(*b*) To qualify W.Os and N.C.Os of the Royal Canadian Engineers as Instructors in Military Engineering, for duty with the Instructional Cadre or with the Corps.

(*c*) To hold courses for the qualification of officers and N.C.O's, of the Canadian Engineers (N.P.A.M.) and to set and correct examinations for Provisional or Camp Schools of Engineering held in other parts of Canada.

The courses given to R.C.E. personnel at the School are:—

Foreman of Works.
Works Sergeants.
Mechanist Electrician.
Mechanist Machinist.
Mechanist Instrument Repairer.
Engineer Clerks.
Engineer Draughtsman.
Instructor in Military Engineering, Class I and Class II.
Defence Electric Lighting; Engine Drivers, Gas and Oil; Searchlight Operators.

In addition, qualifying courses were held during the year at the School for Officers and N.C.O's of the Non-Permanent Active Militia (Engineers).

The location of the Royal Canadian School of Military Engineering at Halifax is not satisfactory. The transportation of personnel to the School from other parts of Canada is very costly, and as a consequence the numbers that can attend courses there are limited. It is hoped that funds and accommodation will soon permit of the moving of the School to some central point in Ontario.

No. 6 Detachment at Halifax is the training detachment of the R.C.E. The strength of the R.C.E. at Halifax on March 31, 1929, was 9 officers and 77 other ranks, including the Royal Canadian School of Military Engineering staff and the staff of the District Engineer Officer. In consequence of those small numbers, it is very difficult to carry out training. However, the detachment trained at McNab's Island in field works, bridging, demolitions, camouflage, road building and camping arrangements, as well as drill and small arms training.

(2) Directorate of Supplies and Transport

Under the Quartermaster-General, the Director of Supplies and Transport is charged with the provision, administration and distribution of all food, forage, fuel, light and disinfectants; transport by rail, water and road —horsed and mechanical; remounts and veterinary services; rental of buildings (in conjunction with the Department of Public Works); telephone services; the allotment and appropriation of barracks and barrack services.

Strict economy in all services has been observed, consistent with efficiency and all services are operating at a minimum strength.

The following is a brief outline of the services rendered:—

Supplies for Troops and Horses

(Permanent and Non-permanent Active Militia)

One thousand eight hundred and sixty-seven contracts for various supplies and services have been made during the past year by the Contracts Branch at the request of this directorate. The following supplies were issued:—

Food rations	701,733
Forage rations	238,021
Hospital diets	26,306

Few complaints were received as to the quality of the food and forage provided by the contractors, and the prices were considered fair and reasonable. Food rations advanced in price 3·18425 cents due mainly to the high price of beef in Eastern Canada and Winnipeg, although the increase was general throughout Canada. These advanced prices ranged from 2 cents to 6 cents per pound increase over 1927 prices.

Forage ration dropped 0·3293 cents in price as a result of a natural fluctuation in prices.

The following is a comparison of the cost per ration during the last five years:—

Food	c.	*Forage*	c.
March, 1925	29·801	March, 1925	36·142
March, 1926	33·1045	March, 1926	36·4509
March, 1927	33·9849	March, 1927	36·9480
March, 1928	34·99565	March, 1928	40·6513
March, 1929	38·1799	March, 1929	40·3220

Lighting and heating of buildings

Supplies of fuel, and the kinds and quality of the coal delivered by the contractors were in accordance with the department's specifications. Canadian coal is used wherever practicable. Anthracite is used only where municipal regulations or the type of equipment, chimneys, etc., prevent use of bituminous coal. Coke was used to a larger extent, where the type of heating apparatus was suitable for its use and compared very favourably with anthracite coal, being very efficient and economical. Tests of various types of Western coals for the new self-feeding furnaces at Fort Osborne Barracks were carried out.

The supply of light to all buildings has been satisfactory and economical.

Transport by Ocean and Rail

The provision of ocean transport is confined to personnel proceeding to and returning from England, in connection with courses of instruction. All accounts for such ocean transport together with miscellaneous accounts for rail transport, are handled by this directorate.

This directorate is responsible for the control of all rail transport in Canada, the issue of which is kept at a minimum. The railways are continuing to give satisfactory service in connection with the movement of troops to and from annual training camps.

Horse Strength—Permanent Active Militia

On March 31, 1929, the total number of horses in the Permanent Force, including Cavalry, Artillery, Infantry, Army Service Corps, and other units, was 634. Some difficulty is experienced in obtaining remounts of a suitable type for cavalry, artillery and other military purposes. The prices remain practically the same, except in the Prairie Provinces where remounts are considerably cheaper than in other parts of Canada. The Department of Agriculture maintains seven breeding stations: Roddick lake, P.Q.; Chaffey's Locks, Ont.; Millarville, Alta.; Ailsa Craig, Ont.; Brampton, Ont.; Russell, Man., and Kamloops, B.C.

Where such breeding stations are in operation the remounts from these localities are of a type noticeably superior, and it is recommended that at least one breeding station should be opened in each province to improve the quality of remounts for military service and to raise the standard of saddle horses for which there is a large and increasing demand.

Veterinary Service

This branch of the service is responsible for the care and health of horses, and the duties in connection with this service have been very satisfactorily carried out, although the establishment has been reduced to a minimum.

Telephones

By careful supervision, and by the installation of extension telephones instead of main telephones wherever possible, the expenditure for this service has been maintained at the lowest cost, without in any way interfering with the efficiency of the service. For the year 1928-29, the total cost for this service throughout the various districts was $18,049.16.

Barrack Services

Included under this heading is the proper conduct of all duties in connection with the receipt, custody, issue and accounting for fuel, light, gas, water, disinfectants and paillasse straw, and also for the allotment of quarters.

The Royal Canadian Army Service Corps

The strength of this Corps on March 31, 1929, was 26 Officers and 212 Other Ranks.

This Corps functions throughout the Dominion for the purpose of providing, administering and accounting for supplies, forage, fuel, light and disinfectants; transporting troops, animals and stores by rail and water; appropriating, allotting and hiring accommodation for both the Permanent and Non-permanent Active Militia.

The Royal Canadian Army Service Corps (Permanent Force) is also employed for the instruction of the Canadian Army Service Corps (Non-permanent Active Militia).

To meet these demands and requirements, a small depot or detachment is located in each Military District, and the officer of the R.C.A.S.C. designated as the District Supply and Transport Officer is attached to the District Headquarters.

The Depots, numbering four in all, in addition to their normal duties, provide Royal and Provisional Schools of Instruction for the training of the R.C.A.S.C. and C.A.S.C.

Depots are located at Halifax, N.S.; London, Ont.; Winnipeg, Man.; and Esquimalt, B.C.

Detachments are located at Toronto, Ont.; Kingston, Ont.; Montreal, P.Q.; Quebec, P.Q.; Saint John, N.B.; Regina, Sask.; Calgary, Alta.; and Ottawa, Ont.

A small R.C.A.S.C. Supply Depot to provide for supplies, barrack services and fuel for the R.C.A.F. and Permanent Force at Camp Borden was organized in the early part of 1927, and is still being maintained.

Training and Instruction

A Royal Canadian Army Service Corps School of Instruction is maintained at Winnipeg, Man., with branch schools at Halifax, N.S.; London, Ont.; and Esquimalt, B.C. These branch schools are under the direct supervision of the Central School at Winnipeg, Man., in order to ensure that all instruction is uniform and up to date.

On first appointment all young officers joining the Corps are posted to Winnipeg for instruction in their Corps duties, and subsequently for training in regimental duties before being posted elsewhere for duty.

The instruction at the Central and Branch Schools has been justified to a very appreciable degree, and it is noticeable that the rules and regulations, and methods of Army Service Corps procedure are systematically being applied in a uniform manner, not only throughout the Royal Canadian Army Service Corps (Permanent Active Militia), but also by the Canadian Army Service Corps (Non-permanent Active Militia), when called upon to carry out their duties at annual training.

The facilities for conducting instruction, such as more qualified instructors, a higher standard of instruction, more up-to-date equipment and appliances, and better accommodation, have been improved and increased and the efficiency of the Corps has greatly benefited thereby.

After four months' instruction in the theory of internal combusion engines, the instructional cadre and selected personnel of the Mechanical Transport Section were again assembled at one point for five months, and underwent a full and complete course of practical mechanical engineering and workshop procedure. The class comprised 5 officers and 20 other ranks. The results were very satisfactory, and now that this personnel has been distributed to where the technical knowledge can best be imparted to others the results should be far-reaching.

The technical instruction of the Mechanical Transport Section has received special and continuous consideration, the standard has been very considerably raised, and the results are very noticeable.

The standard of the Corps in technical and Corps duties is now considered high, and this standard is being maintained by an annual program of instruction for all three branches.

It is very gratifying to note that the Canadian Army Service Corps (Non-permanent Active Militia) has made very rapid strides in training at camp, and at local headquarters. The Corps, as a whole, has displayed the greatest keenness in its duties, and has reached a very fair standard of efficiency. The *esprit de corps* is good.

The mechanization of military forces is absorbing the attention of all nations and great strides have been made in this sphere. The introduction of six-wheelers, a form of vehicle with most of the qualities of a track or semi-track vehicle, plus all the advantages of a wheel vehicle, has given an impetus to mechanization to such an extent that mechanical vehicles are now making their appearance in the first line transport of fighting units, where the horse was once considered indispensable.

Since the last annual report, further trials have been made with six-wheelers.

At the Artillery training camp, Petawawa, where the varied terrain is ideal for the purpose of testing vehicles, two six-wheelers were put to extremely severe tests in hauling guns, and the results were very satisfactory. During the winter, further trials in deep snow were conducted with six-wheelers, and the performances were remarkable. Much data was compiled for future reference.

It might not be out of place to mention that six-wheelers of the light type can now be obtained with winch and cable, which enable the vehicle either to pull itself, or to haul other vehicles, out of difficult places.

After conducting tests with six-wheelers for the past year and a half, in clay, sand, mud, and snow, the department has no hesitation in recommending them for civil purposes, such as road construction, railway construction, lumbering, etc., where roads do not exist, or where the country to be traversed is very difficult. Full information concerning this mode of transportation will be furnished on application to the department.

Inspections

The Director of Supplies and Transport has continued his inspections of Depots and Detachments of the Royal Canadian Army Service Corps, with the object of ensuring uniformity in technical training, drill, equitation and interior economy; also the efficient and economical carrying out of the services of Supply and Transport and Barracks.

The continued improvement under all these headings has been maintained, and the standard of efficiency is very noticeable in all branches.

These inspections are of inestimable value both to the inspecting officer and to the Officer Commanding Depots and Detachments of the Royal Canadian Army Service Corps.

(3) Directorate of Equipment and Ordnance Services

Provision and distribution of clothing, equipment, arms and ammunition for the Militia Services, and of clothing and non-technical stores for the Royal Canadian Air Force, have been carried out as usual during the year.

Priced Vocabulary of Stores and Clothing

Owing to the revision of the Priced Vocabulary of Stores and Clothing which necessitated very considerable changes in nomenclatures, it was necessary to overhaul completely the stocks in Ordnance Depots and rearrange these stocks under the new headings and new sectional arrangement. This was a very trying task but was accomplished very successfully.

Equipment

(*a*) Following the policy of the last two or three years, arrangements were made during the past year for the purchase of considerable equipment which had been previously disposed of by War Office to dealers in England. Considerable savings have again been effected particularly with regard to the purchase of certain machine gun parts and technical instruments.

(*b*) Owing to the fact that wheel shrinkage was causing considerable trouble in Western Canada, a special hydraulic tire setter was purchased and is being installed in Winnipeg to take care of this situation.

(*c*) For indoor rifle shooting during the winter months, this Department has been supplying gallery practice ammunition for use with service arms. This ammunition was not entirely satisfactory and is expensive to produce. It has been decided that as soon as existing stocks of gallery practice ammunition have been used up, the ·22″ ammunition would be issued. This, of course, necessitates the issue of special rifles for use with the ·22″ ammunition. In order to avoid the necessity of purchase of new rifles certain stocks of an obsolete pattern of service arms have been set aside for conversion. The parts necessary to alter 1,250 of these rifles were ordered during the past year. It is expected that this decision will prove very economical and will give more satisfaction to riflemen throughout the country for indoor work.

(*d*) As a first step towards mechanization four six-wheel motor lorries and an artillery staff car were provided for the 3rd Medium Battery R.C.A. at Kingston. It is expected that this will assist very considerably in the training of medium and heavy howitzer batteries of the Non-permanent artillery throughout Canada and, in addition, will very materially relieve the horse situation.

(*e*) A start has been made towards replacing the stocks of gun ammunition which have become very depleted during the past nine or ten years by the annual expenditure for practice purposes.

(*f*) Since the war only a few anti-gas respirators have been provided for the training of personnel. In the past year an order was placed for 1,000 training respirators, and a quantity of anti-gas stores for the training of Permanent Force personnel, and instructors at Schools of Instruction.

Highland Regiments

One infantry regiment (The North Waterloo Regiment) was converted into a Scottish Regiment and renamed "The Scots Fusiliers of Canada."

Dominion Arsenal

The output of the Dominion Arsenal, Quebec, included the following:—

Cartridges, S.A. Ball ·303" Cordite Mk. VII	5,646,820
Cartridges, Q.F. 18-pdr. Case, empty, Mk. III Brass	1,210
Primers, percussion, Q.F. Cartridges, No. 1, Mk. II	26,341
Rifles, aiming, ·22" Q.F. 18-pdr., Mks. I to II Guns (Mark I)	16
Cartridges, filled, B.L. or B.L.C. 15-pdr. 1 lb. 4 oz. blank	5,006
Cartridges, S.A. Ball Revolver, 455"	460,460
Cartridges, S.A. Tracer, ·303" S.P.G.N.C. (Z) (VII G)	50,000
Shell, Q.F. filled, H.E. 12-pdr. 12-cwt., Mk. VIII	270

In addition manufacture and repair of ammunition boxes and also repair of other ammunition was carried out.

Considerable renovation work was carried out at the main plant and some new machinery was installed.

Chief Inspector of Ammunition

This branch carried out the inspection and proof of all ammunition manufactured at the Dominion Arsenal, Quebec, as well as 3,916,000 rounds of cartridges ·22" purchased from the trade. This branch also supervised the manufacture of, inspected and proved, approximately 35,000 pounds of cordite, M.D.T. 5/2 which was manufactured at Beloeil, P.Q., by the Canadian Industries Limited.

Other special investigations of various natures were carried out in connection with explosives generally.

Inspector of Armourers' Services

This officer made a complete inspection of armourers' shops in the Ordnance Depots throughout Canada.

The work of overhauling and repairing rifles, bayonets and scabbards received from overseas after the war was continued throughout the year in the workshops at Quebec.

Disposal of Surplus Stores

Surplus and obsolete stores and clothing to the value of $26,067.47 were disposed of through the Government Salvage Officer by sale or by transfer to other Government departments during the year. The total amount of stores disposed of by this department since the war to March 31, 1929, is valued at $10,301,478.54.

Inspections by R.C.O.C. Inspecting Officers of N.P. Units' Arms, Clothing and Equipment

Eight hundred and eighteen reports of inspection of Non-permanent Units have been received, checked and recorded during the past year. In this connection, records have been maintained of deficiencies and subsequent recoveries entailing the recording of 1,926 Cash Debit Vouchers and 1,205 Cash Credit Vouchers.

Records have been maintained of missing arms. In cases where thefts of stores have been reported and where accounting officers have been unable to recover arms and other stores reported deficient, the assistance of the Royal Canadian Mounted Police has been invoked. In this regard, three hundred and fifteen reports of investigations have been received from the R.C.M.P.

Stocktaking

Weekly reports of stocktaking from all Ordnance Depots show that this important work is well forward.

Of interest in connection with this is the stocktaking of the Ross rifles, with bayonets and scabbards, which are now stored at Lindsay Arsenal. The total stock was checked, registered numbers of rifles noted, the arms oiled, greased and repacked. The result of the stocktaking was satisfactory.

Establishment of the Royal Canadian Ordnance Corps

The authorized limited establishment of the Royal Canadian Ordnance Corps as at 31-3-29 was:—

Officers, 36 (excluding seconded officers—4).

Other ranks, 424 (excluding other ranks carried supernumerary—6).

The actual strength of the Royal Canadian Ordnance Corps as at 31-3-29:—

Officers, 35 (excluding seconded officers—4).

Other ranks, 411 (excluding other ranks carried supernumerary—6).

The distribution of the strength by trades and occupations was as follows:—

Other Ranks—	
Ammunition examiners	6
Armament artificers	18
Armourers	28
Artisans—	
Blacksmiths	3
Carpenters	12
Painters	2
Saddlers	7
Tailors	3
Textile refitters	9
Caretakers	72
Clerks and storemen	243
Eight privates and boys under training in the following trades:—	
Armourers	2
Carpenters	1
Instrument repairer	1
Saddlers	1
Textile refitters	3
	411

Discharges, Enlistments, etc.

The following are the particulars of discharges, enlistments, transfers, etc., carried out during the year:—

Strength decrease, Retirements, Discharges, etc.—	
Officers (deceased)	2
Other ranks (for ordinary reasons, time expired, etc.)	26
Transferred to other units	3
Promoted to Commissioned rank	1
Strength increase—	
Enlistments	15
Transfers between Stations—	
Officer	4
Other ranks	12

Courses of Instruction

During the year local courses of instruction were carried out at Ordnance Depots and qualifying for promotion examinations were held at which 28 other ranks passed successfully.

Courses of Instruction—Officers

There is at the present time one officer of the Royal Canadian Ordnance Corps attending the Advanced Class at the Royal Military College of Science, Woolwich.

Canadian Ordnance Corps (Non-Permanent)

Definite action has been taken to complete the organization and bring up to authorized strength the several Canadian Ordnance Corps (N.P.) Detachments. During the coming camping season it is hoped to carry out training of (N.P.) Ordnance personnel at the Camp Ordnance Depots where possible and at District Ordnance Depots.

Inspections Carried Out by Royal Canadian Ordnance Corps

The Director of Equipment and Ordnance Services inspected the Ordnance Depots at Halifax, Saint John, and the Headquarters Depot during the year, with satisfactory results.

The regular yearly inspection of all guns, howitzers, artillery vehicles, equipment, etc., on charge to units was carried out by Ordnance Mechanical Engineers and all necessary repairs were made; also alterations authorized by list of changes were carried out.

Royal Canadian Ordnance Corps Armourers inspected and repaired where necessary all small arms and machine guns on charge to units.

The clothing and equipment on charge to every unit of the Non-Permanent Active Militia (other than Artillery Units) was inspected, accounts checked and action taken to recover value for all deficiences found by Royal Canadian Ordnance Corps Officers during the year. They were also in attendance whenever a transfer of the command of a unit took place.

Caretakers, Armouries and Drill Halls

Particulars of the number of military and civilian caretakers employed are as follows:—

Military caretakers	72
Civilian caretakers—	
(Chief), Grade III	9
(Full time), Grade II	127
(Part time), Grade I	64
	272

Several recommendations for extra caretakers were received from District Officers Commanding during the year. Funds were not available in all cases, but the most urgent cases were provided for. The situation is constantly under review, adjustments and reallotments being made where appropriate.

REPORT ON CIVIL AVIATION IN CANADA

During 1928 all phases of Civil Aviation greatly increased. The Dominion and Provincial Governments extended the range and variety of their operations. The year has seen a notable increase in the number and quality of commercial aircraft. The result has been a great increase in flying time, particularly in Western and Northern Canada. Three new and important developments have taken place: the inauguration of regular air mail services; the development of flying clubs throughout the country; and the construction of a Mooring Mast and Airship Base at St. Hubert, P.Q.

Civil Government Air Operations

The Director of Civil Government Air Operations is charged (under the deputy minister) with the carrying out of all air operations required by any department of the Government.

During 1928 the following departments used aircraft for a wide and varied range of services: Department of the Interior, Marine and Fisheries, Railways and Canals, Agriculture, Indian Affairs, Mines, Public Works, and Post Office.

Units under the control of the Directorate of Civil Government Air Operations during 1928 were:—

(*a*) Headquarters, Ottawa, Ont.
(*b*) High River, Alta.
(*c*) Winnipeg, Man.
(*d*) Ottawa, Ont.
(*e*) Dartmouth, N.S.

Forest fire detection operations were carried out for the Department of the Interior, Forestry Branch, over an area comprising 64,534,563 acres of forest land in Manitoba, Saskatchewan, and Alberta. During the fire-hazard season 229 fires were detected and suppression action taken on 160 fires.

All air photographic and air survey operations were carried out in co-operation with the Topographical Survey, Department of the Interior, who receive all requests for work, issue the necessary technical instructions and prepare the resultant maps. Close co-operation is also maintained with the survey services of the provincial governments. Eight self-contained photographic detachments were engaged in air photography in various parts of the country. They were controlled by Headquarters, Ottawa, but were attached to the nearest station for stores and accounting purposes. During 1928 an extensive program of air photography was carried out to meet the demands of the different Government departments. Ninety-eight thousand photographs were obtained during the year, of which 17,500 were taken with a camera held obliquely, the resulting oblique views covering an area of 33,800 square miles; and 70,500 with the camera axis vertical, the vertical views covering an area totalling 31,400 square miles. The total flying time for the season, on all operations, was 9,002 hours 28 minutes.

High River Air Station

High River Air Station was active from March 17, 1928, to December 3, 1928, during which period flying to the amount of 801 hours 52 minutes was carried out. The establishment consisted of 4 officers and 19 airmen; 6 DH Moth landplanes were used. Forest fire protection patrols were carried out over the Bow River, Crowsnest, and Clearwater Forest Reserves, comprising 3,260,826 acres of forest land. Sub-bases were established at Rocky Mountain House and

Pincher Creek. Aircraft were fitted with radio transmitters and in conjunction with the Royal Canadian Corps of Signals reliable voice communication was maintained from aircraft in flight to the base, up to a distance of 200 miles. During the year an experimental service was started for the protection of a large area of forest land in the Peace River district. Aircraft on this duty operated from a temporary base at Grande Prairie. Eight fires were observed and reported during the season.

Summary of Operations

The flying for the year was as follows:—

	Hrs.	Min.
Forestry	706	32
Civil aviation inspections, etc.	22	30
Training	40	40
Miscellaneous	32	10
Total	801	52

Winnipeg Air Station

The activities of this station were considerably increased during 1928. New aircraft were provided and bases improved by the addition of better buildings, slipways, hangars, repair shops and store houses. The operations during the season were carried out successfully. Aircraft were used for the following purposes: fire detection patrols; suppression action on fires located; air photography for surveys; forest sketching; transportation of Indian Department officials; obtaining information regarding the distribution of wheat rust spores; dusting growing wheat to prevent rust; transportation and reconnaissance flights for various Government officials and urgent work. The establishment consisted of 25 officers and 72 airmen. Twenty-six aircraft were used. The organization of this station for 1928 was as follows:—

Headquarters, with stores and workshops at Winnipeg, and sub-stations at: (*a*) Lac du Bonnet; (*b*) Norway House; (*c*) Cormorant Lake; (*d*) Ladder Lake; and detachments as follows: (*a*) Winnipegosis; (*b*) Ile-a-la-Crosse; (*c*) Fort Churchill; (*d*) Wheat dusting detachment.

All bases were equipped with radio, which provided adequate means of communication between the units and headquarters at Winnipeg. The total area of forest patrolled by aircraft was approximately 61,237,737 acres, and during the fire-hazard season 179 fires were detected and suppression action taken as required. A total of 567 flights were made and approximately 162,955 miles were flown. The flying time on forest protection was 2,670 hours 15 minutes. The fire-hazard was high all summer, the season being the worst experienced since the introduction of air patrols.

The Fort Churchill Detachment was formed primarily for the Department of Railways and Canals to transport their personnel into Churchill, and also to make coastal ice patrols on the western coast of Hudson bay, between Nelson and Churchill. The personnel consisted of two officers and seven airmen. Two Fairchild aircraft were used. The total flying time was 554 hours.

The Wheat Dusting Detachment consisted of one Keystone Puffer aircraft, which was used for carrying out experiments for the Department of Agriculture by dusting wheat areas in Manitoba infected by black stem rust, with chemicals. The personnel consisted of one officer and two airmen. The total flying time was 40 hours 20 minutes.

In addition transportation was supplied to the Departments of Railways and Canals, Mines, Indian Affairs, Water Power and Reclamation, and the Royal Canadian Mounted Police.

Summary of Operations

The flying for the year was as follows:—

	Hrs.	Mins.
Forestry	2,670	15
Transportation of supplies to photographic detachments	366	45
Photography, Railways and Canals transportation and reconnaissance	583	20
Miscellaneous	120	.....
Total	3,740	20

Ottawa Air Station

The base at Shirley's Bay for summer operations was active from April 10 to December 9, 1928. The establishment consisted of 12 officers and 45 airmen; 13 aircraft were used. About 1,000 square miles of vertical and 200 square miles of oblique photography were done from this station in the vicinity of Ottawa. These were more in the nature of training for personnel who had only a limited experience in air photography. Flying was carried out for the purpose of transportation, practice and instructional flying. Type tests and trials of aircraft, instruments, wireless, aerial cameras and photographic films. Experimental air dusting for the prevention of spruce bud worm in the vicinity of western Ontario were carried out under the direct supervision of the officer in charge of forest insect investigation, Department of Agriculture. Air route investigation flights under the direction of the Controller of Civil Aviation were carried out between Ottawa and Minaki; Ottawa-Halifax; Montreal-Toronto; and Toronto-Buffalo.

Summary of Operations

The flying for the year was as follows:—

	Hrs.	Mins.
Oblique and vertical photography	139	01
Dusting	33	03
Transportation	271	32
Practice and instruction	479	50
Air mail investigation	410	02
Air route investigation	76	20
Test flying, type tests, etc	189	27
Experimental tests (wireless)	44	50
Total	1,644	05

Air Photography

No 1 Photographic Detachment carried out oblique and vertical photography in British Columbia. Two Fairchild F.C.2.W. aircraft were operated. The total flying time was 211 hours 05 minutes.

No. 2. Photographic Detachment carried out vertical photography in northern and eastern Manitoba and northern Ontario. Two Fairchild F.C.2. aircraft were operated. The total flying time was 447 hours 18 minutes.

No. 3. Photographic Detachment carried out oblique and vertical photography in western Ontario, northern Saskatchewan and Manitoba. Two Vickers Vedette flying boats were operated. The total flying time was 327 hours 45 minutes.

No. 4. Photographic Detachment carried out oblique photographic operations in western Ontario, northern Alberta, northern Saskatchewan and northern and central Manitoba. Two Vickers Viking Amphibian flying boats were operated. The total flying time was 359 hours 40 minutes.

No. 5. Photographic Detachment carried out vertical and oblique photography in eastern Ontario and Quebec. Two Vedette aircraft were operated. The total flying time was 325 hours 50 minutes.

No. 6. Photographic Detachment carried out vertical and oblique photography in central and eastern Ontario, and western Quebec. Two Fairchild aircraft were operated. The total flying time was 367 hours 15 minutes.

No. 7. Photographic Detachment carried out vertical photography in Eastern Quebec. Two Fairchild aircraft were operated. The total flying time was 450 hours 53 minutes.

No. 8. Photographic Detachment carried out vertical photography in the Maritime Provinces. Two Fairchild aircraft were operated. The total flying time was 326 hours 25 minutes.

Photographic Section

The Photographic Section, situated in Ottawa, is equipped for the developing, printing, enlarging etc. of all air photographs taken by the Air Service. During 1928 a total of 1,002 rolls of aero film were developed, 90,000 8-inch by 10-inch prints, and 90,000 9-inch by 11-inch prints were supplied to the Topographical Surveys for indexing and mapping purposes. Eighteen thousand miscellaneous prints were supplied to commercial concerns and individuals, and a large number of lantern slides, copies, enlargements, etc. made. This section consisted of 2 officers and 11 trained, and 7 untrained men. In addition, 7 civilian labourers were employed during the busy season. Films were received for development and checked over for defects, camera trouble, drift, overlap, etc., after development, and detailed reports forwarded to Officers in charge of Photographic Detachments, giving details and advice on overcoming such defects. This system of checking kept the work in the field up to a high standard of efficiency. Motion picture films were taken in connection with air mail services, winter activities, forest operations, wheat dusting, etc., and prints made available for educational and publicity purposes.

Hudson Strait Expedition, 1927-28

In January, 1927, a decision was reached by the Government to complete the Hudson Bay railway and terminals, and to send an expedition to Hudson strait. The expedition was under the direction of the Department of Marine. Transportation to the bases, erection of the buildings, etc., was carried out under their supervision and direction. The object of the expedition to Hudson strait was to obtain by air photography and reconnaissance accurate information in regard to ice conditions and to study requirements necessary to ensure safe navigation. The expedition left Halifax on July 17, 1927, arriving at Port Burwell on July 27, 1927, where Base "A" was established. Base "B" was established at Nottingham Island, and Base "C" at Wakeham Bay. The general equipment of the three bases was practically the same and comprised the following: Two Fokker aircraft complete with floats, skis and wheels for landing and all necessary accessories including spare engines. One 30-foot motor launch, one Fordson tractor, radio apparatus consisting of two gasolene engines to generate power, with two 150-foot steel masts, gasolene, oil, coal, stoves, bedding, one skiff, guns, rifles and ammunition. Seven buildings, comprising officers' and mens' dwellings, radio house, storehouse, blubber house, and two hangars, were erected at each base. The expedition consisted of 44 all ranks. The Department of Marine and Fisheries provided for personnel comprising doctors, wireless engineers and operators (for ground communications only) storekeepers and cooks. The Royal Canadian Corps of Signals was responsible for wireless communications and equipment, and provided one officer and three other ranks for this purpose. The Royal Canadian Air Force received the major portion of responsibilities in the organization, and provided 6 officers and 12 airmen. The Royal Canadian Mounted Police detailed one member for duty at each base.

Flying Operations.

A system of routine and special patrols, for all three bases, was drawn up and approved. The patrols commenced from Port Burwell, October 23, 1927; Nottingham Island, October 11, 1927; and Wakeham Bay, September 9, 1927. Flying was done on pontoons until the first ice appeared in the strait. Flying was carried out whenever the weather was favourable. Fog and storms hampered operations and on three occasions aircraft were lost or forced down by bad weather. Operations continued until August 3, 1928, when navigation conditions rendered further air observations unnecessary. The expedition returned to Halifax, arriving their in October, 1928. The results of the air patrols observing ice conditions has been compiled by the Department of National Defence, together with maps, tables, figures, etc., and the whole transferred to the Department of Marine for information, and with a view to further action by that department. Two hundred and twenty-seven patrols were carried out during the period, the total flying time being 369 hours 44 minutes. Two thousand two hundred and eighty-five photographs were taken.

Civil Aviation Division

The Controller of Civil Aviation is responsible to the Deputy Minister of National Defence for the administration of the Air Regulations, and the control of commercial and private flying in Canada; the location and equipment of airways, the construction of airship bases and the oversight of flying clubs. The branch has three divisions, Air Regulations, Airways, and Information.

Statistics

There were in Canada 54 commercial aircraft operating firms, 264 licensed civil aircraft, 259 licensed pilots, 200 licensed air engineers, and 44 licensed airharbours. The number of flights made in 1928 has increased more than 350 per cent over 1927, the figures being: 1927, 16,748, and 1928, 75,285. The hours flown have risen from 12,070 to 43,071, an increase of over 250 per cent. The increase in passengers carried is particularly encouraging, showing a greater public confidence in air travel. The figures are: 1927, 18,932 passengers; 1928, 74,669 passengers; 1927, passenger miles, 1,424,031; 1928, 2,883,782 passenger miles. In the same way freight traffic has increased from 1,098,346 pounds in 1927 to 2,404,682 pounds in 1928. Mail carried: 1927, 14,684 pounds; 1928, 316,631 pounds.

Ontario Provincial Air Service

In Ontario the provincial Government maintains its own air service as part of the Forestry Branch of the Department of Lands and Forests. This service owned and operated 22 aircraft, and employed 20 pilots and 20 air engineers. Its main base is at Sault Ste. Marie. The flying operations in the district lying north and west of the Ottawa river, lake Nipissing and French river were greatly extended in the west part of the province, embracing territory from Port Hope to the Manitoba boundary and extending north to the Berens river. Forest fire detection and suppression patrols, forest type mapping by photography, sketching for inventory work, and transportation to the outlying parts of this district were carried out in 1928. The main operating bases are at Sudbury, Sioux Lookout, and Orient Bay. The total flying time for the year was 6,227 hours; 4,300 square miles of territory was sketched from the air; 4,800 square miles protographed, and 85 forest fires detected.

Commercial Companies

In Quebec, the Provincial Forest Service carry out similar work by contract with commercial aviation firms. Their fire patrol system is not on the same scale as in Ontario, but a large amount of forest type mapping has been done. Contracts were let to the Compagnie Aerienne Franco Canadienne for vertical photography in the Gaspe peninsula, covering an area of 7,550 square miles. Air photography was carried out under contract by Canadian Airways Limited, covering an area of some 2,350 square miles. The Fairchild Aviation Company of Grand'Mere, P.Q., also carried out contracts for industrial companies. In Quebec, nine firms were engaged in mail, express and passenger carrying, instruction, exhibition flying, etc.

In Ontario twenty-five firms were engaged in aviation. A large amount of flying was carried out covering mail, express and passenger carrying, air photography, exhibition flying and instruction.

In Manitoba, Saskatchewan and Alberta, fourteen companies operated aircraft in passenger, mail and freight transportation, instruction and exhibition flying.

In British Columbia, two companies have done a good amount of flying under contract with the provincial Government, British Columbia Forestry Branch, comprising fishery patrols along the Pacific coast, from Vancouver to Prince Rupert, and forest sketching, air photography and exploration. About 200 square miles of territory was patrolled during the season.

In the Yukon Territories, two companies operated in passenger, express and mail carrying.

Air Mail

During the winter of 1927-28, the first regular contract air mail services were inaugurated in Canada by the Post Office Department. During the year 316,631 pounds of mail was conveyed, of which 277,184 pounds were carried under Post Office contracts, the distance covered by contractors being approximately 182,000 miles.

The following services have been provided by the Post Office Department under contract with commercial operating companies: Winter services—Moncton-Magdalen Islands; Quebec-Seven Islands-Anticosti; Leamington-Pelee Island. Summer services—Rimouski-Montreal-Ottawa; Lac du Bonnet-Bissett-Wadhope. Yearly services—Montreal-Albany; Montreal-Toronto; Sioux Lookout-Red Lake District; and The Pas-Kississing.

In addition to the regular mail contracts, special services have been authorized by the Post Office as follows: Whitehorse-Dawson, Y.T.; Waterways-Fort Simpson, with occasional extension to Good Hope on the Arctic Circle. Letters carried over these special services are charged by the operating companies at a special rate of 25 cents for each ounce, special air mail stickers being affixed to each letter.

Experimental services were run between Winnipeg, Edmonton and Calgary, via Saskatoon, between December 10 and 25, 1928, and 2,526 pounds of mail was carried. The experiment was a pronounced success, and this route will be established as a regular service during this year.

To ensure despatch and delivery of transatlantic mails throughout the year, an experimental service was run during the winter 1928-29, between Ottawa-Montreal-St. John and Halifax. A survey was made of the section between Ottawa and Winnipeg during August, 1928. The flying time was 28 hours and the estimated distance 2,237 miles.

St. Hubert Airport and Airship Base

The construction of an airship base and aerodrome at St. Hubert follows the decision of the Dominion to participate in Empire air communications. A triangular site containing 792 arpents was purchased at St. Hubert, some seven miles east of Montreal. A mooring tower has been erected and equipped with the most efficient machinery obtainable, and construction on the airship base has been proceeding for the reception of the British Airship R.101, which is expected to make its first transatlantic passage in the fall of 1929. Hangars, flood lights, tower obstruction lights and a flashing beacon have been installed. A radio and meteorological observation station have been erected. Progress has been made on the grading, drainage, roads, water supply, etc., on the aerodrome.

A number of commercial aircraft operating companies use St. Hubert for passenger, freight and mail services. A school of flying is conducted and the Montreal Light Aeroplane Club have rented space for their operations. It is the terminal for the International Air Services between New York and Montreal. Landing fees, storage charges and terms on which land may be leased to commercial operators have been drawn up.

Light Aeroplane Clubs

To stimulate airmindedness, to promote the knowledge and use of aviation among the rising generation, and to encourage the provision of flying fields, the Dominion Government has lent assistance in the formation of light aeroplane clubs in the chief centres of population. Two light aeroplanes, complete with engines, are issued to each club approved by the Honourable the Minister of National Defence. Each club receives a grant of $100 for each pupil trained by the club. Each club must provide its own flying field, arrange for the services of an instructor and air engineer and have at least thirty members ready to qualify as pilots, and have not less than ten members already qualified. In the spring of 1928 sixteen clubs were approved and received the grant. Fifteen clubs were active during the year. These clubs have a membership of 3,400. During the first year of operations nearly 10,000 hours were flown. There were 260 Ab Initio soloists; 142 private licenses and 43 commercial licenses have been obtained by members. Provision has been made in the estimates for eight further clubs which will be active early in 1929.

Aeronautical Engineering Division

The Chief Aeronautical Engineer is responsible to the Deputy Minister of National Defence for all technical and engineering matters pertaining to the Air Services, and prescribed by the Air Board Act and Regulations thereunder.

The whole function of the Aeronautical Engineering Division is to act in a consulting capacity for the other branches of the Air Services upon purely technical matters. This division is now organized in three main branches: Research, Airworthiness, and Inspection.

Research

The most important items during the past year have been the experimental flights carried out on the "Vista" aircraft, which is a single seater all metal flying boat, with "Genet" engine. This aircraft has shown that it is possible to construct a small metal boat without any serious handicaps due to weight, but it has also indicated that a boat of this small size is only suitable for use in sheltered waters, because moderate waves are proportionately very large. These experiments should assist in the production of a small sporting boat, when the demand for an aircraft of this type arises.

A good deal of development work has been done upon the "Wasp" Fairchild aircraft, which has been extensively used for photographic work.

Following the twin engined "Varuna" it was decided to experiment upon a duralumin hull for a flying boat of this size, and the preliminary work upon the design of such a boat has been carried out with Messrs. Canadian Vickers, who are now designing the "Vancouver" aircraft, which is a twin tractor flying boat with a duralumin hull, equipped with "Lynx" engines.

Some work has been done upon the production of the combined ski and wheel, and alternatively upon a combined ski and float. These problems, however, depend largely upon the demand being sufficient to warrant the cost of the experimental work.

Airworthiness

The Airworthiness Branch has carried out a large number of regulations on the airworthiness of aircraft of different types for the Civil Aviation Branch. This work, although of a routine nature, occupies a considerable portion of the work of the Engineering Branch and is likely to grow with the growth of the industry.

By an agreement with the United States, airworthiness certificates issued by the United States Department of Commerce for aircraft built in the United States, are now recognized for acceptance in Canada, and on the other hand Canadian certificates for aircraft built in Canada are recognized for acceptance by the United States. This exchange has necessitated a good deal of investigation work upon the methods used by the United States Department of Commerce and those previously used in Canada.

Inspection

With the growth of the aircraft industry in Canada, the inspection of aircraft during construction for the purpose of granting certificates, has been increased.

Aircraft Inspection Detachments are now stationed at Montreal and in the Ottawa district, and provision is being made for the establishment of another detachment in the Winnipeg district.

It has not been the policy of the department to carry out detailed inspection of aircraft under construction, except in the case of new aircraft manufacturing companies, but the inspection has been limited to periodical inspection during the course of manufacture, relying upon the inspection carried out by the manufacturing companies themselves for all detailed inspection.

The Chief Aeronautical Engineer represents the department upon the Canadian Engineering Standards Association and the Associate Air Research Committee, which is one of the committees of the National Research Council.

The Air Research Committee have carried out a number of interesting researches during the past year, including the commencement of the determination of the complete stability of a flying boat type of aircraft. This work is being done under the direction of Professor Parkin at Toronto University, and should be completed during the coming year.

In the summer of the past year a visit was made to Europe for the purpose of studying the aircraft industries in various countries and for the purpose of obtaining the latest information that might be employed in Canada. A great deal of information was obtained that can be used to good advantage, particularly upon the construction of metal aircraft.

This division supplied a representative for the International Convention for Civil Aviation held at Washington at the end of the year, when a number of interesting questions were considered. Amongst them was the proposal from the Canadian delegation that a real international standard for airworthiness should be set up, or at any rate that the preliminary discussions towards this end should be commenced.

In the field of lighter-than-air aviation, this division has acted in a consulting capacity to the Civil Aviation Branch and to the Public Works Department upon the construction of the mooring tower and facilities for handling airships at St. Hubert Airport.

These questions were investigated not only in Europe, but also by visiting the Airship Station at Lakehurst during the landing of the Graf Zeppelin, and investigating the facilities provided by the United States authorities on this occasion.

The Aircraft Industry

The program of construction for 1928 of Messrs. Canadian Vickers included twelve Avro aeroplanes, four new hulls for Viking Amphibians, nine Vedette three-seater observation and photographic flying boats for forest patrol for the Department of National Defence, and other contracts to commercial companies. The Government experimental patrol machine Vigil, intended for the Rocky mountain region, was completed and tested. Thirteen Fairchild five-seater monoplanes were constructed under license during the year. This firm increased the use of metal in aircraft construction.

The DeHavilland aircraft of Canada Limited established a plant at Mount Dennis, Toronto, for the service and assembly of their aircraft. During the year they delivered 62 aircraft to users in Canada. The Moth was extensively used by light aeroplane clubs, and was the type selected by the Government.

The Curtis-Reid Aircraft Co., Limited, established an airport at Cartierville, P.Q. Their first product is the Reid Rambler, a two-seater light aeroplane, manufactured entirely of metal and covered with fabric.

The Ottawa Car Company Limited have done considerable reconditioning work for the Government and commercial operators. They have arranged with the A. V. Roe and the Consolidated Aircraft Company of Buffalo for service, assembly and distribution of their products.

The Armstrong-Siddeley Motors Limited, Canadian Wright Limited, and Canadian Pratt and Whitney Aircraft Company, Limited, have established branches for the assembly, service and distribution of their aero engines.

During the year 264 aircraft were operated by civil organizations, and 63 by the Directorate of Civil Government Air Operations, making a total of 327 aircraft used in civil operations. A large number of these are of British and United States manufacture, but there has been a marked increase in Canadian manufactured aircraft.

REPORT OF THE CHIEF ACCOUNTANT (1928-29)

The expenditure and revenue statements contained in this report relate only to Militia and Air Services; the Naval expenditure being dealt with in the report for the Naval Service.

Following are tables of expenditure and revenue for the fiscal years 1927-28 and 1928-29. Expenditures on account of Civil Government Salaries and Contingencies are not included in these tables but are shown in statement No. 3, appendix "A".

EXPENDITURE—MILITIA, AIR AND GENERAL SERVICES

Year	Militia Votes	Air Votes	General Votes	Adjustment of War Claims	Imperial War Graves	Battlefields Memorials	Total
	$	$	$	$	$	$	$
1927-28	10,166,706	3,891,861	244,204	132,630	573,419	183,067	15,191,887
1928-29	11,045,827	5,040,505	239,950	112,492	573,698	160,873	17,173,345
Decrease	.....	.....	4,254	20,138	.....	22,194	.....
Increase	879,121	1,148,644	.....	.....	279	.....	1,981,458

CREDITS—REVENUE—MILITIA, AIR AND GENERAL SERVICES

Year	Revenue				
	Militia Services	Air Services	N.W.T. Wireless Stations	Demobilization Previous Years	Total
	$	$	$	$	$
1927-28	228,217	19,094	24,504	9,834	281,649
1928-29	229,025	21,014	36,407	730,080	1,016,526
Decrease	.....	.....	.....	.....	.....
Increase	808	1,920	11,903	720,246	734,877

The following statements of expenditure and revenue will be found in appendix "A":—

1. Appropriation Accounts, 1928-29.
2. Revenue, 1928-29.
3. Comparative statement of Expenditure and Revenue for ten years 1919-20 to 1928-29.
4. Expenditure on account of Adjustment of War Claims, 1928-29.

The increase in expenditure over the previous year was due mainly to the following:—

Militia Votes—

(*a*) Purchase of militia stores generally.
(*b*) Increased purchases and production of artillery and small arm ammunition towards replacement of annual expenditures.
(*c*) Increased activities and training of Non-Permanent Active Militia.

Air Services—

(*a*) A substantial increase in operations carried out for other Government departments in connection with aerial photographic surveys; forestry patrols; reconnaissance and transportation; investigation of forest and grain pests, etc.

(*b*) Investigation and development of air routes.

(*c*) Construction of an aerodrome and airship base at St. Hubert, P.Q., to enable the Dominion to participate in Empire air communications.

While the expenditure on account of Adjustment of War Claims is steadily decreasing, there are still a number of unclaimed credits for War Service Gratuity, Separation Allowance, etc., due to ex-members of the Canadian Expeditionary Force and their dependents, whose addresses are unknown to the department. Applications for these credits are being received from time to time, therefore provision has to be made for them as well as for other expenditures arising out of the late war.

The decrease in the expenditure for Battlefields Memorials is due to work on the Vimy Memorial not progressing as rapidly as anticipated.

The allocation and analysis of Cadet Services and militia training expenditures as well as an analysis and costing system in connection with radio services performed by the Royal Canadian Corps of Signals were continued with satisfactory results.

REPORT OF THE ASSISTANT DEPUTY MINISTER

Submitted herewith are reports relating to (1) Civilian Staff, (2) Printing and Stationery, and (3) Central Correspondence Registry.

(1) Civilian Staff

Minor changes in the general civilian organization of the department have been carried out by the Civil Service Commission during the fiscal year. In the Air Service Branch progress has been made in the establishment of a new civilian organization required as a result of the change in control referred to in this report for the fiscal year 1927-28.

The comparative table given below shows the number of civilian employees, permanent and temporary, in the Department of National Defence at Ottawa and elsewhere in Canada, and the amounts paid in salaries, on April 1, 1928, and April 1, 1929.

During the fiscal year covered by this report, there was an increase of two in the number of permanent employees at Ottawa, and an increase of sixty-two outside of Ottawa. The small increase at Ottawa is due to the permanent appointment of junior temporary employees who had been performing duties of a permanent nature. The increase of sixty-two outside Ottawa represents the permanent appointment of temporary caretakers who, for some time, had been performing duties of a permanent nature and who, it was considered, should be given permanent status in the public interest.

The change in the number of temporary employees, both at Ottawa and elsewhere, is accounted for by the usual fluctuations in the number of workmen employed for short periods on construction and repair work.

—	Number of Employees		Amount of Salaries	
	April 1, 1928	April 1, 1929	April 1, 1928	April 1, 1929
			$ cts.	$ cts.
At Ottawa—				
Permanent	387	389	56,705 58	57,451 47
Temporary	73	92	9,184 13	9,512 34
Outside Ottawa—				
Permanent	228	290	32,464 73	38,103 51
Temporary	479	439	39,078 52	35,710 92
	1,167	1,210	137,432 96	140,778 24

These figures do not include 315 factory employees at the Dominion Arsenal, Quebec, nor 146 workmen employed at the Naval Dockyards, Halifax and Esquimalt.

(2) Printing and Stationery

Statement showing work performed and expenditure:—

—	1927-28	1928-29	Increase or Decrease
Printing requisitions issued	981	1,188	+ 207
Stationery requisitions issued	2,575	2,697	+ 122
Record of sales of military books	$ 2,320 04	2,837 61	+ 517 57
Expenditure for printing	28,987 53	29,267 22	+ 279 69
Expenditure for stationery	17,171 46	19,511 47	+2,340 01
Express and freight	2,768 56	2,691 57	− 76 99

+ = Increase. − = Decrease.

(3) Correspondence Registry

	1927-28	1928-29	Increase or Decrease
Files charged-out	260,682	237,790	− 22,892
Incoming files recorded or passed	435,681	416,829	− 18,852
Loose papers received	229,343	244,632	+ 15,289
Files created	10,922	12,850	+ 1,928
	936,628	912,101	

+ = Increase, − = Decrease.

REPORT OF THE JUDGE ADVOCATE-GENERAL

Courts-Martial

During the fiscal year ending March 31, 1929, fifty-seven District Courts-Martial were convened and held, this being a decrease of eighteen compared with the number of such courts held in the preceding year. Of these courts-martial fifty-five were for the trial of military personnel and two for the trial of personnel of the Royal Canadian Air Force.

Thirty-five courts dealt with charges of desertion and in thirty-one of these a further charge of losing arms, clothing and equipment was laid. In one instance the finding and sentence of a court-martial, which had been confirmed, were quashed on the advice of the Judge Advocate-General, and in two other instances it was necessary to quash the conviction on one of several charges which had been laid.

It is evident from a review of the proceedings of all courts-martial held during the last fiscal year, that there has been an endeavour on the part of all officers concerned to improve their knowledge of military law and court-martial procedure, and the number of errors and irregularities which occurred was neither very great, nor were they of a particularly serious nature. Nevertheless, it is apparent that there should be established a more comprehensive method of instruction in military law and court-martial procedure, together with improved facilities for the dissemination of advice on technical points connected therewith.

Legislation

During the year under review the only legislation drafted by the Judge Advocate-General was a small Bill making certain amendments to the Militia Pension Act so as to provide for the computation of officers' pensions on the pay and allowances received during the three years immediately preceding retirement, and to enable pension payable to an officer who for not less than three years had been a member or associate member of the Defence Council, being computed on the pay and allowances received as such member or associate member, should the same be more beneficial to him.

Orders

The adoption of a new procedure relating to the issue of Orders and Regulations resulted in there being established an Orders Committee for each of the three services administered by the Department of National Defence, and the Judge Advocate-General was appointed chairman of each of these committees. Consequently, all General Orders and amendments to Regulations now pass through his office, thereby increasing to a considerable extent the duties with which that office is normally charged.

Investigations and Courts of Inquiry

The Judge Advocate-General carried out several investigations of an important nature and, in addition, was in attendance at a number of Courts of Inquiry.

Pensions

Consequent upon the amendments to the Militia Pension Act made at the last session of Parliament, a large number of cases had to be reviewed, thereby resulting in a temporary increase in the number of matters normally referred to the Judge Advocate-General. Practically all these cases have now been examined and dealt with.

General

The usual volume of references and requests for opinions was maintained, and there was a considerable increase in the number of daily interviews.

REPORT OF THE DIRECTOR OF CONTRACTS

As in the past years the work of the Contracts Branch has been devoted principally to the purchase and inspection of stores for the Naval, Military, and Air Services, and the making of contracts for the necessary services in connection therewith.

As the department comprises three separate and distinct services, and as the equipment required for any one of them is, with few exceptions, unsuitable for either of the other two, it was necessary to purchase a very wide range of stores of different kinds.

The supplies purchased included uniform and other clothing of different patterns; boots, shoes, and rubbers; furniture; field equipment of various kinds; guns and gun carriages; automobiles, trucks, and other military vehicles; ammunition; paints, varnishes, and oils; ironmongery; copper, lead; telegraph and wireless apparatus; armament and torpedo stores; boats; aircraft, aero engines, and flying equipment of all kinds; provisions; fuels; forage; medical and veterinary supplies, and a very wide range of other stores, such as are necessary for the use of the Naval, Military, and Air Services.

Contracts were also made for electric lighting; snow cleaning; conservancy; scavenging; laundry, washing, and dry cleaning; cartage; removal of buildings, etc., at different points throughout the country, and for various other services incidental to the proper maintenance of Permanent as well as Non-Permanent Services.

Supplies were also purchased for the use of Imperial ships based at Bermuda Dockyard.

During the financial year under review, there were received in the Contracts Branch 3,612 requisitions which were prepared by the different requisitioning officers at Headquarters. These requisitions, which called for supplies of different kinds, varied as to the number of articles required, some of them containing hundreds of different items. Altogether 5,093 orders were placed during the year. The value of the clothing, stores, provisions, etc., purchased on account of these requisitions was approximately $4,250,000.

In addition to the requisitions prepared at Headquarters, about 8,200 requisitions made out at the different stations, in which units of the Permanent Naval, Military, and Air Forces are located, were also received. These latter requisitions covered supplies purchased or services carried out at outside points.

It may be mentioned that, during the financial year, ninety-five aircraft of different types for use in forestry patrol, photographing, training, and other purposes, were purchased. The engines for a large number of these aircraft were purchased as complete equipment with each machine. In addition separate orders were placed for 21 aeroplane engines.

All supplies purchased, either in England or in United States, for delivery to Ottawa, have to be cleared from customs on their arrival here. During the financial year 872 customs entries were passed.

In effecting purchases competitive tenders were invited in practically every instance, thus affording the trade every opportunity to secure the business and at the same time enabling the department to obtain the supplies required to the best possible advantage. The policy of purchasing stores manufactured in Canada from Canadian material was strictly adhered to and was departed from only when certain stores required were not procurable in this

country. When it was necessary to purchase goods of foreign manufacture preference was given as far as possible to supplies manufactured in Great Britain.

All stores delivered at Ottawa were subjected to a rigid inspection by the departmental inspectors who were guided in their work by sealed patterns, specifications and drawings. In the case of provisions, fuel, and forage, purchased for delivery to points throughout the country, the inspection was carried out under the supervision and direction of the Officer Commanding the Military District, the Naval Store Officers at Halifax and Esquimalt Dockyards, and the Officers Commanding the different Air Stations throughout the country.

APPENDIX "A"

The following are statements showing:—

(1) Appropriation Accounts, 1928-29.
(2) Revenue, 1928-29
(3) Comparative statement of Expenditure and Revenue for ten years 1919-20 to 1928-29.
(4) Expenditure on account of Adjustment of War Claims, 1928-29.

STATEMENT NO. 1—APPROPRIATION ACCOUNTS 1928-29, MILITIA AND AIR SERVICES

Appropriation	Amount authorized	Expenditure	Appropriation unused	Appropriation exceeded	Remarks
MILITIA SERVICES:—					
Main Appropriations—					
Administration	317,000 00	304,367 00	12,633 00		Orders for printing, stationery and publications not completed in time for payment, also part of reserve for unforeseen expenditure not utilized.
Cadet services	500,000 00	499,979 47	20 53		
Contingencies	40,000 00	39,003 64	996 36		
Engineer Services and Works	830,000 00	828,584 65	1,415 35		
General Stores	891,800 00	887,327 57	4,472 43		
Manufacturing Establishments	587,000 00	586,935 76	64 24		
Non-Permanent Active Militia	2,315,000 00	2,314,821 04	178 96		
Permanent Force	4,950,000 00	4,951,524 30		1,524 30	Pay of Major-Gen. Thacker for 3 months transferred from Administration Vote 21/5/29.
Royal Military College	375,000 00	372,101 11	2,898 89		
Topographic Survey	45,000 00	44,988 34	11 66		
Transport and freight	215,000 00	214,693 97	306 03		
Total Main Appropriations	11,065,800 00	11,044,326 85	22,997 45	1,524 30	
Miscellaneous Appropriations—					
Compassionate Grants	1,500 00	1,500 00			
To widow of the late Alex. MacCannell.....$900					
To Paul Andrews..... 500					
To Joseph Henry Welch. 100					
Total Militia Services	11,067,300 00	11,045,826 85	22,997 45	1,524 30	
AIR SERVICES:—					
Civil Air Operations	2,807,297 07	2,805,111 88	2,185 19		
" " expended by Department of Public Works	537,739 93	537,739 93			
	3,345,037 00	3,342,851 81	2,185 19		
Royal Canadian Air Force	1,697,694 00	1,697,653 23	40 77		
Total Air Services	5,042,731 00	5,040,505 04	2,225 96		
GENERAL SERVICES:—					
Civil Government Salaries (including Statutory $10,000)	739,755 00	715,631 14	24,123 86		Changes in personnel and classification; temporary vacancies due to resignation, etc.; positions abolished during the year.
Civil Government contingencies	60,000 00	59,816 30	183 70		
Civil Pensions	1,415 42	1,415 42			
Construction of Magazine at Halifax, N.S.	100,000 00	99,819 64	180 36		
Total General Services	901,170 42	876,682 50	24,487 92		
OTHER SERVICES:—					
N.W.T. Radio Services Mackenzie Basin System	139,000 00	138,715 40	284 60		
Canadian Battlefields Memorials	180,000 00	160,872 83	19,127 17		Work on the Vimy Memorial did not progress as rapidly as anticipated.
Imperial War Graves Commission	573,780 00	573,697 89	82 11		
Adjustment of War Claims (Militia)	150,000 00	112,492 20	37,507 80		Expenditure lower than anticipated.
Total Other Services	1,042,780 00	985,778 32	57,001 68		
Total Militia, Air, General and Other Services	18,053,981 42	17,948,792 71	106,713 01	1,524 30	

STATEMENT NO. 1—APPROPRIATION ACCOUNTS, 1928-29, MILITIA AND AIR SERVICES

Appropriation	Amount authorized	Expenditure	Appropriation unused	Appropriation exceeded	Remarks
STATUTORY:—					
Gratuities to families of deceased officials	.....	1,405 66	.....	.....	
Aid to civil power	.....	6 80	.....	.....	
		1,412 46			
Grand total expenditure (except Naval)	.....	17,950,205 17			

For Naval expenditure *see* separate report of Naval Services.

STATEMENT NO. 2, REVENUE—MILITIA AND AIR SERVICES, FISCAL YEAR 1928-29

MILITIA SERVICES—		
Barrack damages	$ 144 12	
Commission on pay phones	61 22	
Conscience money	125 00	
Damage to government property	12 00	
Discharges by purchase	10,751 50	
Labour and material	309 08	
Railway subsidies	569 12	
Refund previous years expenditure	6,268 61	
Rent stores and camp equipment	8,786 78	
Rent military properties	12,116 67	
Sales, ammunition, stores and clothing	1,958 67	
Sales, books, maps, etc	5,114 08	
Sales, cast horses	1,807 00	
Sales, condemned stores and scrap	9,905 91	
Sales, government property	1,752 00	
Sales, government property (interest)	1,577 81	
Sales, medals & ribbons (lost and replaced)	8 50	
Snow dumping privileges	250 00	
Wood cutting privileges	226 00	
	$	61,744 07
Bank interest		75 31
Fines and forfeitures		70 00
Pensions (deductions)		146,930 76
Premium, discount and exchange		0 55
Royal Military College (cadet fees)		20,204 00
	$	229,024 69
Northwest Territories:—Wireless Stations (receipts)	$	36,407 00
AIR SERVICES—		
Air harbour licenses	$ 340 00	
Air worthiness and stress analysis	1,005 00	
Barrack damages	28 00	
Discharges by purchase	3,460 00	
Ground fees and hangar rentals	2,296 50	
Landing and storage fees	1,919 50	
Passenger fees	129 90	
Private pilots licenses	462 00	
Registration fees	1,090 00	
Rents	1,030 47	
Sales, aerial photos, etc	5,740 58	
Sales, surplus stores	1,481 84	
Sales, Government properties	200 00	
Stores and clothing	40 35	
Taxes	4 13	
Telephone tolls	26 10	
Tractor service and labour	176 10	
Miscellaneous (refund previous years expenditure and sundry sales)	1,502 20	
	$	20,932 67
Premium, discount and exchange		1 82
Fines and forfeitures		80 00
	$	21,014 49

STATEMENT No. 3—Comparative Statement of Expenditures and Revenue (Militia and Air Services) for the ten years 1919-20 to 1928-29

Expenditure	1919-20	1920-21	1921-22	1922-23	1923-24	1924-25	1925-26	1926-27	1927-28	1928-29
	$	$	$	$	$	$	$	$	$	$
MILITIA SERVICES—										
Main Appropriations—										
Administration	360,818	368,883	356,275	316,731	319,518	299,415	295,540	298,551	306,294	304,307
Cadet Services	74,414	230,288	409,348	336,933	450,000	367,829	410,195	395,936	498,201	499,979
Contingencies	13,803	49,073	41,151	39,743	27,025	23,844	29,179	20,351	23,832	39,004
Engineer Services and Works	294,407	539,546	582,112	525,666	529,815	499,545	565,554	565,540	802,989	828,585
General Stores	.....	436,450	525,959	484,134	482,622	335,448	378,033	389,151	607,722	887,328
Manufacturing Establishments	.....	689,322	696,276	437,107	445,033	415,820	419,657	419,570	469,632	586,936
Non-Permanent Active Militia	471,022	1,155,727	1,902,630	1,678,544	1,690,207	1,551,257	1,676,336	1,709,939	2,078,256	2,314,821
Permanent Force	3,088,691	5,705,736	5,882,938	5,425,105	5,125,605	4,769,339	4,775,601	4,798,121	4,797,578	4,951,524
Royal Military College	244,239	351,031	377,450	341,284	374,141	364,944	366,705	339,336	363,413	372,101
Topographic Survey	40,522	45,125	39,956	42,330	43,399	34,614	34,223	36,969	39,994	44,988
Transport and Freight	24,854	315,443	199,815	168,247	180,706	157,688	162,318	160,789	163,964	214,694
Total Main Appropriations	4,612,770	9,886,624	11,013,910	9,795,824	9,668,071	8,819,743	9,113,341	9,134,253	10,151,975	11,044,327
Miscellaneous Appropriations, Etc.—										
War, Demobilization and Adjustment of War Claims (Militia)	323,360,987	16,229,764	7,916,360	4,273,445	678,320	479,159	286,441	148,894	132,630	112,492
Canadian Battlefields Memorials	7,797	164,756	137,421	180,736	108,773	95,313	180,422	150,650	183,067	160,873
Imperial War Graves' Commission	.....	378,966	522,115	378,442	371,785	446,896	472,519	799,767	573,419	573,698
Wireless Stations N.W.T. (Radio Services)	.....	.....	.....	.....	.....	.....	146,830	137,779	142,736	138,715
Civil Pensions	1,254	1,115	1,115	1,115	1,115	1,115	.....	.....	See Gen.	Services
Various special Votes, etc	17,803	6,130	1,914	467	6,155	500	17,919	24,340	14,731	2,906
Consolidated Revenue—Workmen's Compensation Act	1,411	.....	.....	.....	.....	.....	.....	.....	.....	.....
Aid to Civil Power	.....	.....	593	61,430	86,615	8,623	126,368	6,968	1,929	7
Toronto Barracks—Special Account	.....	144	.....	78	.....	177	494	.....	.....	.....
Total Miscellaneous Appropriations, etc	323,389,252	16,780,875	8,579,518	4,895,713	1,252,763	1,131,783	1,230,993	1,268,398	1,048,512	988,691
Civil Government—										
Salaries	202,459	212,732	551,991	540,757	See Gen.	Services.				
Contingencies	18,996	19,837	25,968	15,991						
Total Civil Government (Militia)	221,455	232,569	577,959	556,748	.....	.....	.....	.....	.....	.....
Grand Total Militia Services	328,223,477	26,900,068	20,171,387	15,248,285	10,920,834	9,951,526	10,344,334	10,402,651	11,200,487	12,033,018
AIR SERVICES—										
Main Appropriations—										
Royal Canadian Air Force—Operation, Maintenance, training, repairs, civil aviation, etc	109,464	1,583,910	1,659,842	999,983	999,390	1,102,206	1,139,848	2,197,645	Vote divided—see under	
Purchase of Aircraft and technical equipment, ground services	.....	.....	.....	.....	249,788	275,122	740,767	.....	.....	.....
Royal Canadian Air Force	.....	.....	.....	.....	.....	.....	.....	.....	1,645,604	1,697,653
Royal Canadian Air Force—Expended by Dept. of Public Works	.....	.....	.....	.....	.....	.....	.....	.....	24,035	.....

Civil Air Operations:—For Government departments; Control of Civil Aviation; establishing air routes, aerodromes and airship bases, etc.									2,140,652	2,805,112
Expended by Department of Public Works									81,570	537,740
Civil Government—										
Salaries		34,369			See Gen.	Services.				
Contingencies		38,077								
Total Main Appropriations	109,464	1,656,356	1,659,842	999,983	1,249,178	1,377,328	1,880,615	2,197,645	3,891,861	5,040,505
Miscellaneous Appropriations—										
Demobilization		351,372								
Aeronautical Research				5,000						
Grand total Air Services	109,464	2,007,728	1,659,842	1,004,983	1,249,178	1,377,328	1,880,615	2,197,645	3,891,861	5,040,505
GENERAL SERVICES—										
Miscellaneous—										
Civil Pensions							1,835	1,835	1,468	1,415
Construction of Magazine, Halifax, N.S.						31,986	49,961	72,293	100,000	99,820
Various Special Votes, etc.						23,612	8,234	2,060	1,680	
Civil Government—										
Salaries (For Militia, Naval and Air Services as amalgamated.)					666,213	648,773	685,140	687,528	703,966	715,631
Contingencies (For Militia, Naval and Air Services as amalgamated.)					41,894	49,860	41,936	45,438	69,992	59,816
Total General Services					708,107	754,225	787,106	809,154	877,106	876,682
REVENUE										
MILITIA SERVICES—										
Militia Revenue										
Casual Revenue	87,867	86,815	141,012	283,372	105,944	112,045	119,415	172,649	79,819	61,744
Royal Military College	53,599	70,107	67,315	61,999	66,105	63,975	52,645	18,239	20,232	10,627
Pensions Act, 1901	47,979	120,387	112,412	121,244	124,654	127,095	131,099	128,386	128,017	146,931
Fines and Forfeitures	5,375			100	81	40	80		75	70
Bank interest							23	72	74	75
Premiums, discount and exchange							1	21		1
Total Revenue, Militia Services	194,820	277,309	320,739	466,715	296,784	303,155	303,263	319,367	228,217	219,448
NORTHWEST TERRITORIES—										
Wireless Stations (receipts)							22,226	24,183	24,504	36,407
AIR SERVICES—										
Pilot's Certificates	46	78	21	8	2	4			10	462
Air Harbour Licenses		359	90	40	80	40	160	50	125	340
Air Worthiness		455	65	80	70	165	95	170	385	1,005
Fines and Forfeitures									700	80
Registration Fees		275	75	125	120	135	95	185	370	1,090
Rents		842	4,817	2,299	1,019	556	600	727	1,200	1,030
Miscellaneous (refunds previous years expenditure and sundry sales)		4,657	30,673	24,517	10,196	8,268	13,354	8,169	16,304	17,005
Premiums, discount and exchange		43	23	4	45		10			2
Total Revenue, Air Services	46	6,700	35,764	27,073	11,532	9,168	14,254	9,301	19,094	21,014

STATEMENT NO. 4—ADJUSTMENT OF WAR CLAIMS (MILITIA)—STATEMENT OF EXPENDITURE FOR THE YEAR ENDED MARCH 31, 1929

Particulars	Amount
	$ cts.
Separation Allowance	15,014 55
War Service Gratuity	13,391 85
Pay and Allowance	5,574 14
Historical Section	22,397 85
Ordnance Services	14,316 96
Transport and Travelling	1,800 89
Civilian Employees	1,149 40
Estates of Deceased Soldiers	971 24
Medals and Memorial Crosses	1,075 72
Legal Expenses	1,901 13
Postage	1,193 02
Printing and Stationery	1,602 12
Washington Memorial	46 00
Canadian War Graves	20,882 18
Seignorial Dues (St. Gabriel Val Cartier)	10,000 00
Miscellaneous	1,175 15
Total for year	112,492 20
Expenditure prior to April 1, 1928 for War Services	1,559,377,720 85
	1,559,490,213 05

APPENDIX B

PAY SERVICES

Following are statements for the fiscal year showing:—

STATEMENT No. 1—Expenditure by Stations on account of Pay and Allowances of the Permanent Active Militia for the fiscal year 1928-29.

Station	Strength all ranks 31-3-28	Strength all ranks 31-3-29	Pay and Allowances Officers and Warrant Officers	Pay and Allowances N.C.Os and Men	Total Pay and Allowances
			$ cts.	$ cts.	$ cts.
London, Ont.	220	191	103,361 80	150,543 85	253,905 65
Toronto, Ont.	420	362	229,550 92	255,660 01	485,210 93
Kingston, Ont.	383	370	218,116 74	247,384 63	465,501 37
Ottawa, Ont.	299	288	327,754 98	233,559 52	561,314 50
Montreal, P.Q.	233	212	146,826 20	138,549 46	285,375 66
Quebec, P.Q.	254	235	106,170 40	173,195 60	279,366 00
Halifax, N.S.	551	469	307,585 36	300,174 14	607,759 50
Saint John, N.B.	51	49	47,259 18	36,906 12	84,165 30
Winnipeg, Man.	466	408	212,183 79	247,197 35	459,381 14
Victoria, B.C.	254	215	156,007 51	167,031 87	323,039 38
Regina, Sask.	51	49	46,093 00	38,931 12	85,024 12
Calgary, Alta.	156	139	107,688 92	105,374 74	213,063 66
Total	3,338	*2,987	2,008,598 80	2,094,508 41	4,103,107 21

*Does not include 97 Officers and 180 Other Ranks paid from Administration, R.M.C. Geographic Section, Cadet Services, R.C.A.F., N.W.T., and other votes.

STATEMENT No. 2—Expenditure by Stations on account of Pay and Allowances of the Royal Canadian Air Force for the fiscal year 1928-29.

Station	Strength all ranks 31-3-28	Strength all ranks 31-3-29	Pay and Allowances Officers and Warrant Officers	Pay and Allowances, N.C.Os and Men	Total Pay and Allowances
			$ cts.	$ cts.	$ cts.
Toronto, Ont.	174	261	107,944 87	192,244 83	300,189 70
Ottawa, Ont.	254	297	212,641 24	217,569 02	430,210 26
Montreal, P.Q.	3	2	3,709 08	2,024 73	5,733 81
Halifax, N.S.	2	.....	.....	1,604 14	1,604 14
Winnipeg, Man.	99	113	63,663 38	116,877 84	180,541 22
Victoria, B.C.	16	22	9,703 06	25,924 43	35,627 49
Calgary, Alta.	23	26	15,185 66	25,577 87	40,763 53
Total	571	*721	412,847 29	581,822 86	994,670 15
Personnel of R.C.C.S., R.C.O.C., R.C.A.M.C. and Instructional Cadre paid from R.C.A.F. Funds	.....	74	19,404 62	42,922 55	62,327 17
			432,251 91	624,745 41	1,056,997 32

*Includes 46 Officers, Non-Permanent R.C.A.F., permanently employed.

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DOMINION OF CANADA

REPORT

OF

THE DEPARTMENT OF NATIONAL DEFENCE

(NAVAL SERVICE)

FOR THE

FISCAL YEAR ENDED MARCH 31

1929

200—9-29 (3116)
N.S. 65—1-19

OTTAWA
F. A. ACLAND
PRINTER TO THE KING'S MOST EXCELLENT MAJESTY
1929

OTTAWA, July 1, 1929.

To His Excellency the Right Honourable Viscount Willingdon, G.C.S.I., G.C.M.G., G.C.I.E., G.B.E., Governor General and Commander in Chief of the Dominion of Canada.

MAY IT PLEASE YOUR EXCELLENCY:

I have the honour to submit, herewith, for the information of Your Excellency and the Parliament of Canada, the Seventh Annual Report of the Department of National Defence (Naval Service), for the fiscal year ended March 31, 1929.

I have the honour to be,
Your Excellency's most obedient servant,

J. L. RALSTON,
Minister of National Defence.

91510—1½

OTTAWA, July 1, 1929.

The Honourable
The Minister of National Defence,
Ottawa.

SIR,—I have the honour to inclose, herewith, Annual Report of the Department of National Defence (Naval Service) for the fiscal year ended March 31, 1929.

I have the honour to be, sir,
Your obedient servant,

G. J. DESBARATS,
Deputy Minister.

REPORT

OF THE

DEPARTMENT OF NATIONAL DEFENCE (NAVAL SERVICE)

FOR THE FISCAL YEAR ENDED MARCH 31, 1929

OTTAWA, June 30, 1929.

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Deputy Minister, Department of National Defence,
Ottawa.

SIR,—I have the honour to submit the following report on the Naval Service of Canada for the fiscal year ended March 31, 1929, under the following headings:—

1. Personnel.
2. H.M.C. Ships.
3. R.C.N. Barracks.
4. H.M.C. Dockyards.
5. Naval Intelligence.
6. Naval Stores.
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1. PERSONNEL

ROYAL CANADIAN NAVY

The authorized complement of the Royal Canadian Navy was increased from 550 to 710 during the past year. The present complement comprises 82 officers, 12 commissioned warrant and warrant officers, and 616 men, who are allocated to ships and establishments as follows:—

	Officers	Men
Naval Headquarters	10	1
R.C.N. Barracks, Halifax	17	156
R.C.N. Barracks, Esquimalt	18	156
H.M.C.S. *Champlain*	5	82
H.M.C.S. *Vancouver*	5	82
H.M.C.S. *Festubert*	1	20
H.M.C.S. *Ypres*	1	20
H.M.C.S. *Armentieres*	1	20
H.M.C.S. *Thiepval*	1	20
Serving in the Royal Navy and for new Destroyers under construction	35	59
Total	94	616

Officers.—Officers of the Royal Canadian Navy are entered periodically as Cadets, according to the requirements of the service.

Only candidates between 17 and 18 years of age for Paymaster Cadet and between 17½ and 18½ years of age for Naval Cadet, who have resided in Canada for at least two years immediately preceding date of application are considered.

Before acceptance a candidate must successfully pass a strict medical examination, and must be found suitable, in all respects, for entry and service as an officer of the Royal Canadian Navy.

The education standards required are between Junior and Senior Matriculation. In many of the subjects Junior Matriculation standards are sufficient, but in some subjects, particularly mathematics, the higher standard is necessary.

Every candidate must successfully pass written examinations which are set and conducted by the Civil Service Commission of Canada. The subjects of examination are as follows:—

PART I

(*a*) English; (*b*) General Knowledge; (*c*) one of the following subjects: Modern language; or General History; or Everyday Science.

PART II

Any three of the following subjects, of which Lower Mathematics must be one:—

(*a*) Latin; or (*b*) Greek; or (*c*) French; or (*d*) German; or (*e*) Modern History; or (*f*) Lower Mathematics; or (*g*) Higher Mathematics; or (*h*) Physics; or (*i*) Chemistry; or (*j*) Biology.

No candidate may offer similar subjects in Parts I and II, i.e., a candidate taking a modern language in Part II may not offer a modern language in Part I; a candidate taking Physics, Chemistry, or Biology, may not offer Everyday Science; a candidate taking Modern History may not offer General History.

Candidates who are selected for entry proceed to England for training and service up to the time when they complete the qualifying courses for Lieutenant.

Any Cadet who is found unsuitable in any respect may be required to withdraw from the service.

The cost of training is paid by the department, but all other expenses must be met by the Cadet.

The expenses probably devolving upon the parents of Naval Cadets are as follows:—

(i) Travelling expenses in connection with examination for entry in the R.C.N.—The most economical arrangements possible are made, and such expenses are not in any case great.

(ii) Transportation when proceeding on leave.—The cost to the parent varies according to the arrangements made.

(iii) Uniform.—Must be supplied by the parent at his own expense.

Its cost is about $325, and additional uniform necessary on promotion to Midshipman after twelve months' service is about $100 extra.

On reaching the rank of Sub-Lieutenant, an officer is required to provide himself with the uniform of a commissioned officer, and parents must assist their son to the extent of about $250 on his promotion to commissioned rank at about 21 years of age.

(iv) Private Allowance.—Parents are required to make on behalf of the Cadet a private allowance at the rate of $250 per annum, from the time of joining the Naval Service until he reaches the rank of Midshipman (i.e., for approximately twelve months).

This allowance is utilized to provide for all necessaries incidental to the Cadet's training, e.g., purchase of books, entertainment, etc., and is in no way a personal allowance to the Cadet himself.

Private allowance, together with the Cadet's pay of 25 cents a day, and the allowance for messing, is normally sufficient to meet his expenses other than clothing, travelling expenses, and expenses when on leave, but should this not be the case, the deficit which would probably be of small amount, is chargeable to the parent.

General.—Parents may authorize their sons to receive additional private allowance whilst in the training ship for sightseeing, personal purchases ashore, etc.

It is undesirable that young officers should have the control of large sums of money, and arrangements can be made for travelling expenses and any money which may be required for any special circumstances, to be advanced by the Accountant Officer of the officer's ship, with the authority of the Commanding Officer, and recovered from the parent.

On promotion to Sub-Lieutenant, an officer should be able, with reasonable economy, to meet all his expenses, other than for uniform, out of his pay.

Cadets are paid 25 cents a day from the date of entry until they become Midshipmen, after which date they receive pay and allowances of officers of corresponding rank in the Royal Canadian Navy.

On promotion to Lieutenant officers are allowed to specialize, according to the requirements of the service in gunnery, torpedo signalling, wireless telegraphy, navigation or physical and recreational training.

The first four officers trained under the present scheme of entry, who joined in 1924, are now Sub-Lieutenants. Two of these are in the executive branch, one is an accountant officer, and one is an engineer officer. Three of these have now returned to Canada for service in H.M.C. ships, and the fourth, the engineer officer, is following qualifying courses in England.

One of these officers (Sub-Lieutenant H. F. Pullen) was awarded the King's Dirk as the best all-round cadet of all the Royal Navy and Royal Canadian Navy Cadets of his class.

Two Midshipmen, entered as cadets in 1926, served throughout the year in H.M. ships, undergoing instruction and gaining experience.

Three Cadets and one specially entered Lieutenant entered in 1928, and proceeded to England. The Cadets attended cadetship training throughout the remainder of the year in H.M.S. *Erebus*, the R.N. training ship stationed at Devonport, and the Lieutenant attended lieutenants' qualifying courses.

At the present time officers, particularly those below the rank of Commander, are usually employed about one-third of their time in ships of the Royal Navy. This service allows them to obtain a wide experience and keeps them up-to-date with technical advances. The policy is specially suitable for officers of the Royal Canadian Navy, as they are employed, for the most part, on instructional duties while serving on home stations.

One officer annually is sent to the Royal Naval Staff College, Greenwich. The course is in the nature of an advanced survey of naval subjects, particularly suitable to officers in the higher ranks of the profession.

One officer has completed the course at the Imperial Defence College, London, and one officer is now attending the college. The course at this institution is designed to bring together officers of the Navy, Militia and Air Force and officials of the Civil Service. The problems of each force in its relation to the others are thoroughly studied and systems of co-operation between the defence forces are formulated. It can be readily understood that training there is very valuable to Canadian officers, as all the defence forces in Canada are administered by one minister of the Crown. One officer completed "1st Class Ship Course"; one officer completed a requalifying course as interpreter in French; two officers attended and passed the requalifying course in Signals; one officer attended an advanced course in Navigation; three officers attended qualifying course for the rank of Lieutenant and one officer attended Engineering course for Sub-Lieutenant (E).

One Lieutenant-Commander has been loaned to the Air Force and is taking a Mooring Mast Course at Cardington Air Station, England.

Fourteen officers served during the year in appointments to H.M. ships.

Two officers were retired during the year to promote economy and efficiency.

One Chief Petty officer passed all the qualifying examinations for and was promoted to warrant rank.

During the year, eleven Lieutenants completed eight years' service in that rank, and were promoted to the rank of Lieutenant-Commander. This promotion is automatic.

Two Lieutenant-Commanders, who were fully qualified, under the regulations for promotion to the rank of Commander, were promoted to the latter rank.

Three commissioned officers, three commissioned warrant officers and two warrant officers are serving on loan in the Royal Canadian Navy from the Royal Navy.

Men.—The term of enrolment of men in the Royal Canadian Navy is seven years.: Entries are made principally in the seaman, accountant and stoker branches, vacancies in other branches being filled by transfer of men already serving.

Youths between 16½ and 17½ years of age are given preference. Before entry, all candidates undergo a strict medical examination and are required to submit credentials showing their suitability as to character and educational standard. Only well educated youths of good character are considered. Owing to the limited complement of the service and the few vacancies to be filled, the number of applicants for entry greatly exceeds the number of vacancies, and the department is enabled to choose those applicants who possess the highest qualifications.

The pay of ratings ranges from fifty cents a day for boys and $1.65 a day for ordinary seamen to $3.25 a day for chief petty officers. In addition to the above pay, men receive free maintenance and medical treatment, and free clothing on entry and subsequent allowance for maintenance.

As a rule, up to the time that men reach the rating of leading seaman they are under continuous theoretical or practical training. This training comprises full courses of instruction, including examinations in disclipinary training, seamanship, gunnery, torpedo, signalling, wireless telegraphy, engine room work and physical and recreational training.

Disciplinary Training.—This training includes dril, marching manoeuvres, and other disclipinary evolutions, and a thorough knowledge of disciplinary regulations.

Seamanship.—Under this heading the basic instruction for training an efficient seaman is given. The courses are sub-divided as follows:—

(a) *Rigging.*—Complete training in rigging and fitting, including splicing in hemp and wire. Knowledge of hawsers, tackles and boats' falls, fitting work and maintenance. The operation of paravanes. The rigging of sheers and derricks. Target work.

(b) *Anchors.*—A practical knowledge of the working of anchors, cables and capstans under all circumstances. Laying out anchors, and weighing anchors from boat.

(c) *Rule of the Road.*—Practical knowledge of the regulations for prevention of collisions at sea.

(d) *Boat Work.*—Knowledge and practical management of boats under power, sail and oars. Taking charge of and instructing a boat's crew of boys or young seamen, under oars or sail. Knowledge of boats, fittings and gear.

(e) *Organization.*—To be acquainted with any evolution carried out in H.M.C. ships, and to know the internal organization of any part of a ship.

(f) *Signals.*—To be able to interpret any signal in the boats' signal book with the aid of the book. To have sufficient knowledge of semaphore

and Morse to make and read a message at a slow rate. This training is required of all seamen, apart from the specialist signal training which ratings of the signal branch undergo.

(g) *Compass, Helm and Lead.*—To be able to steer a ship and instruct men in the duties of helmsman. To have a sufficient knowledge of compass to undertake quartermaster's duties and to act as coxswain of a drifter or picket boat. To have a practical knowledge of sounding and to take charge of a sounding party.

(h) *General Ship Work.*—To have a good knowledge of the watertight fittings, pumps and simple construction details of a ship. To be able to write up a ship's log. To be able to read a barometer. To have a knowledge of chart reading, including laying off a course. Knowledge of the British uniform system of buoyage.

Gunnery.—Training in gunnery comprises instruction in mountings, mechanism and operation of guns, range finding, spotting and gun-laying. The training includes thorough instruction in the evolutions necessary for preparing for action, firing and reloading. Exactitude and despatch in carrying out the intricate evolutions of gun operation is an important factor in a well trained ship's company. The ratings train to take their proper stations and carry out the individual operations required of them, which fit into the whole plan of action of the ship's company. Precision of action is specially necessary in gunnery work.

As training in gunnery progresses, ratings qualify in, and are given the non-substantive rating of seaman gunner, gunlayer, gunner's mate, turret director layer, and light director layer, according to their qualifications and to the special gunnery duties in which they specialize.

The non-substantive ratings gained carry with them a small daily rate of pay ranging from 5 cents to 30 cents.

Torpedo.—This training includes instruction in the construction, assembly and adjustments and operation of torpedoes, and also instruction in electricity. Qualification in torpedo carries with it non-substantive ratings and additional pay on the same basis as for gunnery ratings.

Signalling and Wireless Telegraphy.—Signalling and wireless telegraphy plays an important role in the manoeuvring of each ship and of a number of ships working together. Through the use of semaphore, flag signalling and flashing a large part of the instructions to the various parts of a ship and also to other ships, is given. The standard of ability of signal ratings must be high, so that messages may be sent and received with exactitude. For this reason, ratings for the signal branch are chosen from amongst the best educated and brightest ratings. Advancement to higher ratings in the branch is made only after thorough training and experience and rigorous examination.

Likewise, wireless telegraphy plays an ever increasing part in naval organization. The development of short-wave communication over great distances has brought in closer communication, the squadrons of the British Naval Defence forces. Organized routines of communication, in which the Canadian Navy forms an essential and important part are in operation.

Owing to the short period covered by these developments, it has not been possible to train a sufficient number of Canadian naval ratings to fill all requirements, and the department's needs have been met by the temporary loan of trained wireless telegraph ratings from the Royal Navy. A Wireless Telegraph and Signal School has been established at Halifax under direction of an officer who is a specialist in these subjects. A class of nine ratings is now in course of instruction, and will shortly proceed to England for practical experience in fleet work. On their return to Canada after approximately nine months' training abroad, they will be fully trained to take over a large portion of the work

and a proportionate number of Royal Navy ratings on loan can be relieved from service in the Royal Canadian Navy. New classes are formed from time to time and attend the training school for preliminary training or advanced courses. This system ensures that all requirements of the service will be met by R.C.N. ratings in the near future, and that the facilities for qualifying for advancement will be available in Canada.

Engine Room.—Training in engine room duties includes instruction in the construction, mechanism, assembly and operation of engines and boilers, including fuelling, care and maintenance; full knowledge of propelling gear; full knowledge of auxiliary machinery. The preliminary training and seagoing experience is given in ships and establishments of the Royal Canadan Navy. Owing to the small size of the ships at present in commission, however, advanced training in auxiliary machinery and mechanical training cannot be given in Canada. The training is carried out in ships and establishments of the Royal Navy.

Physical and Recreational Training.—This training includes gymnasium work, setting up exercises, and drills and athletic training. The daily routine life of a naval rating is arduous, and only by systematic physical training and development can the personnel of a ship's company be kept physically fit. The athletic training, comprised in sports such as hockey, association and rugby football, and baseball, which is established under supervision and direction of the service, not only helps materially in maintaining the force in good physical condition, but has a direct bearing on the morale of the men, tends to make them keen, not only in sports but also in their daily routine of work, gives them an interesting source of amusement in their spare time in the precincts of naval establishments, and prevents them from spending their spare time away from naval environment, where young men may readily contract habits derogatory to health and discipline. From many angles, therefore, physical and recreational training is very beneficial to the general conduct and efficiency of the force.

With the exception of advanced engine room training, all the above courses of training are given in H.M.C. ships and establishments. Classes are formed, as requisite, and the personnel of H.M.C. ships is rotated so that on completion of courses ratings proceed to sea and put into practical application the matter which they covered in the theoretical courses.

During the year the following training classes were in operation:—

Boys and First Entry Training Classes.—The training comprised elementary instruction in seamanship, signals, gunnery, torpedo, boat pulling, school, physical and disclipinary drill. At Halifax 90 ratings and at Esquimalt 85 ratings followed the courses during the year.

Ordinary Seaman Training Classes.—This course follows immediately the First Entry Training Class, and covers the same subjects in more advanced stages. At Halifax Ordinary Seamans' Classes were not conducted at R.C.N. Barracks, but the ratings followed the courses while at sea in H.M.C. ships. At Esquimalt 71 ratings followed this training. On completion of the course ratings proceed to sea for practical seagoing experience.

Signal Training Class.—Signal ratings are chosen to fill vacancies in complement from the most suitable seaman ratings desiring to transfer to the signal branch. On transfer they train specially in the Signal Training Class, after which they serve in ships of the Royal Navy to gain experience in ships on squadron service. This training cannot be given in Canada, owing to the limited number of ships available. Five ratings completed the Signal Course.

Wireless Telegraphy Classes.—Vacancies in the Wireless Telegraphy Branch are filled in a similar manner to vacancies in the Signal Branch. The training classes are in charge of a specialist officer.

Nineteen ratings completed the course during the year.

For advanced gunnery, torpedo, signal, wireless telegraphy and engineering courses, ratings proceed to England. The Admiralty have placed the training facilities of the Royal Navy at the disposal of the department, which pays a proportionate amount of cost of training. Owing to the small number of ratings specializing at any one time in the Royal Canadian Navy, the overhead costs of organizing and maintaining training establishments with the equipment necessary for advanced courses is prohibitive, and it is much more economical to follow the procedure of sending the men to England to qualify.

During the year R.C.N. ratings followed courses in R.N. establishments as follows:—

Seaman torpedoman	9 ratings
Leading torpedoman	6 "
Torpedo gunner's mate	2 "
Torpedo coxswain	1 "
Seaman gunner	6 "
Gunlayer 2nd Class	8 "
Gunner's mate (re-qualifying)	1 "
Physical and recreational training	1 "
Mechanical training	6 "
Ordnance (requalifying)	1 "
Petty officer telegraphist	1 "
Gunner (T) (qualifying)	2 "
Regulating petty officer	1 "
Signal course	4 "

Upon the increase of complement, to provide partly trained crews for the new destroyers, recruiting expanded and the increase of 150 ratings authorized was fully met by new entries from shore in Canada. Vacancies caused by discharge to shore of ratings were also filled by entry of applicants from Canada, and complements have been kept up to strength throughout the year. In several cases, trained ratings from the Royal Navy, whose homes are in Canada, have been transferred to the Royal Canadian Navy.

During the year 54 ratings completed their engagements of whom 36 re-engaged, 14 did not wish to re-engage and 4 were refused. The percentage of re-engagements is satisfactory and will become more so as the full benefits of the pension provisions are realized by the ratings now serving.

In addition to the technical training, the department maintains a school of instruction in academic subjects in charge of one English and one French schoolmaster at Halifax, and one English schoolmaster at Esquimalt. The schoolmasters are civilians and are fully qualified school teachers, under the Provincial Educational laws. School attendance is compulsory for junior ratings. Voluntary classes are held for older ratings. All ratings, therefore, have every facility at their disposal to advance educationally.

During the year 55 ratings passed the Educational Test, Part I, at Halifax and Esquimalt. The Educational Test, Part I, qualifies a rating educationally for advancement to Petty Officer.

The Higher Educational Test is the qualifying examination for advancement to Warrant Rank. During the year ten ratings passed this examination. In this examination, it is not necessary that ratings pass in all subjects at one time, but they are permitted to take one or more subjects at a time, and are credited with subjects in which they pass until they have successfully completed all the examinations required.

The standard of efficiency has advanced since 1922, when the present policy in naval affairs was formulated and under the present system of training the improvement will be more marked from year to year.

Forty-five ratings are serving on loan in the Royal Canadian Navy from the Royal Navy, of which 7 are Signal and 14 W/T ratings.

Royal Canadian Naval Reserve

The authorized strength of the Royal Canadian Naval Reserve is 70 officers and 430 men. The recruited strength is 35 officers and 141 men.

Officers.—Officers of the Royal Canadian Naval Reserve receive their commissions during pleasure. To qualify as an officer, in this force, applicants must be British-born subjects domiciled in Canada, of good character, and physically fit for naval service, must not belong to any other force, must be willing to serve at sea or wherever required, must follow the sea as a profession and must be in possession of a Board of Trade or Canadian Government Certificate of Competency as master of seagoing steam passenger ships.

The thirty-five officers serving are under the following registry districts: Halifax, 14; Charlottetown, 1; Saint John, 1; Quebec, 7; Montreal, 2; Vancouver, 6; Victoria, 4.

Officers train as follows:—

Skippers and Chief Skippers—Twenty-eight days biennially (i.e., first, third, etc., years).

Midshipmen—Six months' training during first year and thereafter twenty-eight days biennially.

Sub-Lieutenants—Twenty-eight days' (gunnery course) during first year, twenty-eight days afloat or at R.C.N. Barracks during second year, twenty-eight days afloat during the third year, and thereafter twenty-eight days biennially.

Lieutenants (Direct Entry)—Twenty-eight days biennially beginning with first year.

Acting Engineer Lieutenants—Three months' continuous training during first year.

Engineer Lieutenant—Twenty-eight days' training biennially.

Acting Warrant Engineer—Three months' training during first three years of entry or promotion, one month's training to be completed in first year.

Warrant Engineer—Twenty-eight days' training biennially.

Accountant Officers—Twenty-eight days' training during the first year and thereafter fourteen days' training biennially. Registrars who are entered as Accountant Officers are not obliged to perform naval training.

Officers are also permitted to carry out voluntary service, in addition to naval training, to take specialist courses. The length of voluntary service is decided in each case according to the time required for the specialist course to be followed.

While attending for naval training and voluntary service, officers receive the pay and allowances paid to officers of corresponding rank in the Royal Canadian Navy.

They receive in addition an annual retaining fee as follows:—

Lieutenant Commanders and Lieutenants	$125 00
Sub-Lieutenants	100 00
Chief Skippers and Commissioned Engineers	125 00
Skippers and Warrant Engineers	100 00

The payment of retaining fee is contingent upon the fulfilment of all obligations undertaken by the officer on enrolment.

During the year three officers from Quebec District and eight from Halifax District completed naval training. No R.C.N.R. officers carried out voluntary service.

Four officers enrolled during the year and no officers were discharged.

Ratings.—Ratings enrol in the Royal Canadian Naval Reserve for five years' service. Candidates for entry must have the following qualifications:—

They must be British subjects domiciled in Canada of good character and physically fit.

They must not belong to any other force.

They must follow a seafaring life, except stoker and artificer ratings, who may, on special approval of the department, be entered while employed on approved work ashore.

All ratings must agree to be vaccinated or revaccinated and inoculated.

The Royal Canadian Naval Reserve has not been recruited to its full strength. The number of ratings was, however, increased by eight. The total number of ratings enrolled is 141.

During the year nineteen ratings enrolled in the Royal Canadian Naval Reserve and nine ratings, whose period of enrolment expired, re-enrolled for a further period of five years.

The following ratings were discharged for the reasons shown:—

Ceased to be domiciled in Canada	2
Failed to carry out naval training	4
Completed engagement	2
Unsuitable for the R.C.N.R.	1
Services no longer required	1
Transferred to Royal Canadian Navy	1
Total discharged	11

The following ratings carried out naval training and voluntary service:—

	Naval Training	Voluntary Service
Charlottetown	20	3
Quebec	27	5
Saint John	4	1
Halifax	24	7
Montreal	22	9
Victoria	5	1
Vancouver	4	1
Total	106	27

The training of R.C.N.R. ratings is carried out at the naval bases at Halifax and Esquimalt and in H.M.C. ships. The courses followed cover the general principles involved in training ratings of the permanent force, but in the short time available detailed instruction cannot be given nor can the ratings attain the precision of action attained by the permanent force. As these ratings follow the sea as a profession this training covers subjects of a strictly naval character, such as gunnery, torpedo, mine-sweeping, etc. Seamanship training, except advanced courses, is not necessary as the men acquire a good knowledge of the general principles in that subject in their civil avocation.

While training ratings of the R.C.N.R. receive pay at the same rates as like ratings in the R.C.N. In addition annual retainer is paid as follows: C.P.O's and P.O's, $80; leading rates, $64; other ratings, $48.

Royal Canadian Naval Volunteer Reserve

The authorized strength of the Royal Canadian Naval Volunteer Reserve is 70 officers and 930 men.

The general conditions of entry are as follows:—

Applicants must

(1) be British subjects domiciled in Canada in the vicinity of a unit headquarters.
(2) be physically and educationally fit for service.
(3) be willing to serve at sea or wherever required.
(4) not belong to any other force.

The Royal Canadian Naval Volunteer Reserve is organized in full companies or half companies. The full companies comprise from four to eight officers and 103 men, and are located in Montreal, Toronto and Winnipeg. The half companies, comprise from two to six officers and 51 or 52 men, and are located in Halifax, Charlottetown, Saint John, Quebec, Ottawa, Hamilton, Saskatoon, Regina, Calgary, Edmonton, Vancouver and Prince Rupert.

Officers and men are required to carry out a minimum of thirty drills each year, at company headquarters. Ratings receive a bounty of twenty-five cents for each drill attended up to thirty drills per annum, and an additional $5 annually on completing forty or more drills.

While attending naval training and voluntary service, officers and men are paid the daily pay authorized for like officers and men of the Royal Canadian Navy.

In addition to the organization for service drills, each unit has a social and athletic organization. The cost of all social activities is met by private subscription.

Officers.—Sixty-two officers are serving in the force. These officers are attached to units of the R.C.N.V.R. as follows: Charlottetown, 2; Halifax, 3; Saint John, 3; Quebec, 4; Montreal, 4; Ottawa, 5; Toronto, 8; Hamilton, 5; Winnipeg, 9; Regina, 4; Saskatoon, 3; Edmonton, 2; Calgary, 4; Vancouver, 2; Prince Rupert, 4. Eleven officers performed naval training during the year. No officers carried out voluntary service. While on naval training officers receive the same pay as officers of like rank in the Royal Canadian Navy.

Men.—Ratings of the Royal Canadian Naval Volunteer Reserve enrol for a period of three years. The total number of ratings enrolled is 795. These ratings belong to units as follows: Charlottetown, 54; Halifax, 35; Saint John, 41; Quebec, 32; Montreal, 79; Ottawa, 44; Toronto, 110; Hamilton, 49; Winnipeg, 81; Regina, 50; Saskatoon, 51; Edmonton, 49; Calgary, 49; Vancouver, 43; Prince Rupert, 28.

During the year 227 ratings enrolled in the force and 48 ratings, whose period of engagement expired, re-enrolled.

The following ratings were discharged for the reasons indicated:—

Changed place of residence	77
Non-attendance at drills	96
Deceased	3
Completed engagement	22
Transferred to the Royal Canadian Navy	23
At their own request	11
At request of Company Commanding Officer	5
Failed to qualify as efficient	2
Misconduct, or services no longer required	6
Transferred to Royal Canadian Naval Reserve	1
Transferred to Royal Canadian Air Force	1
Transferred to Royal Canadian Mounted Police	2
Medically unfit	4

The total discharges for all reasons numbered 253.

The following numbers of ratings carried out naval training and voluntary service in H.M.C. ships and establishments, and also in H.M. ships cruising in Canadian waters:—

Unit	Annual Training	Voluntary Service	Training in H.M. Ships
Halifax	19	16	2
Saint John	28	10	.....
Charlottetown	27	.....	.....
Quebec	23	6	2
Montreal	53	6	.....
Ottawa	27	8	.....
Toronto	70	29	3
Hamilton	33	18	1
Winnipeg	77	42	28
Calgary	39	8	3
Edmonton	24	11	9
Saskatoon	35	14	1
Regina	27	13	5
Vancouver	22	8	8
Prince Rupert	15	2	6
Total	519	191	68

Royal Fleet Reserve

The Department of National Defence (Naval Service) has undertaken to train in H.M.C. ships, ratings of the Royal Fleet Reserve residents in Canada up to the number of 150.

The cost of transportation, while proceeding to and from annual or biennial naval training, the cost of training and other expenses connected therewith, and training fees, are paid by the British Admiralty.

Complete records of Royal Fleet Reserve ratings in Canada are kept by the department, which also makes all the arrangements for the men to come up for drill and for payment of quarterly retaining fees. Copies of all records and transactions are forwarded to the Imperial authorities for completion of their records.

The total number of Royal Fleet Reserve ratings on the register of the department is one hundred.

Fifty-six Royal Fleet Reserve men completed training during the year.

2. H.M.C. SHIPS

The following ships were in full commission during the year:—

Based at Halifax, N.S.—

H.M.C.S. *Champlain,* destroyer.
H.M.C.S. *Festubert,* minesweeper.
H.M.C.S. *Ypres,* minesweeper.

Based at Esquimalt, B.C.

H.M.C.S. *Vancouver,* destroyer.
H.M.C.S. *Thiepval,* minesweeper.
H.M.C.S. *Armentieres,* minesweeper.

H.M.C.S. Champlain and Vancouver.—These destroyers are on loan without charge to the Royal Canadian Navy from the British Admiralty to replace the obsolete destroyers *Patriot* and *Patrician.*

The *Champlain* (late *Torbay*) and *Vancouver* (late *Toreador*) were laid down in 1917, but construction was not completed until after the termination of the war. They were in commission in the Royal Navy during 1919 and 1920, and in reserve until February, 1928, when they were commissioned in reserve at Portsmouth for the Royal Canadian Navy.

During February, 1928, the ships were in dockyard at Portsmouth fitting out for the long voyage to Canada.

On March 1, 1928, they were fully commissioned and manned by Canadian naval officers and men.

The ships sailed from Portsmouth for Canada on March 17, 1928, following the southern Atlantic route. This route, although longer than the North Atlantic route, was chosen to avoid winter conditions and to allow refuelling at ports within a safe cruising radius for this type of ship.

When passing through the bay of Biscay the ships met heavy weather and suffered damage to their boats and upper deck fittings. The damage was repaired at Las Palmas, Canary Islands.

En route to Canada the ships called at Saint Vincent (Cape Verde Islands), Trinidad, and Jamaica.

At Jamaica the ships parted company, H.M.C.S. *Vancouver* proceeding via Panama canal, Manzanillo (Mexico), and San Pedro (California) to Esquimalt, and H.M.C.S. *Champlain* via Bermuda to Halifax. H.M.C.S. *Champlain* arrived at Halifax on May 12, and H.M.C.S. *Vancouver* at Esquimalt on May 24.

On arrival in Canada both ships were placed in drydock and thoroughly examined No defects of machinery or construction were found.

The ships proved excellent in a sea-way and economical in fuel consumption.

They were placed in service on leaving dockyard hands and continued in full commission throughout the year.

The destroyers are used specially for giving to R.C.N. men and reserve officers and men practical seagoing experience, and training in gunnery, torpedo, signals, wireless telegraphy and engine-room duties.

H.M.C.S. *Champlain* during training cruises visited the following ports: Saint John, Quebec, Montreal, Three Rivers, Murray Bay, Little Metis, Gaspé, Charlottetown, Digby, Yarmouth, Lunenburg, Liverpool, Shelburne, Clarks Harbour, Baddeck, Sydney, Bermuda, Jamaica, Dominica, Saint Vincent, (B.W.I.), Trinidad, Barbadoes, and Grenada.

At Quebec, His Excellency the Governor General inspected the ship and proceeded for a short cruise down the St. Lawrence River. A Guard of Honour from the ship was present at the unveiling of two memorial tablets by His Excellency.

A similar Guard of Honour was present at a memorial service held at Tusket, N.S.

During the cruise to Baddeck and Sydney complete gunnery and torpedo exercises, including full calibre firings at towed targets and torpedo runs, were completed.

During the winter months *Champlain* cruised in British West Indies waters in company with ships of the America and West Indies Station. Throughout this cruise tactical exercises and joint gunnery and torpedo training were conducted.

H.M.C.S. "Vancouver"

This ship was on duties similar to those performed by *Champlain.*

During cruises the ship visited the following ports: Vancouver, Prince Rupert, Queen Charlotte, Port Alexandria, Nanaimo, Ladysmith, New Westminster, Seattle, Comox, Winter Harbour, Port Alice, Port Alberni, Christie Bay, Uclueleset, Jordon River, Brentwood, Mill Bay, Banfield, Port San Juan, Portland, San Francisco, San Diego, Magdalena Bay, and San Pedro.

H.M.C. Minesweepers

H.M.C.S. *Ypres* and *Festubert* were in commission throughout the year and were utilized principally for sea training of R.C.N.V.R. and R.C.N.R. ratings. The ships completed numerous cruises of one or two days' duration off Halifax but with the exception that H.M.C.S. *Festubert* assisted *Champlain* at Baddeck during gunnery and torpedo exercises, no extended cruises were carried out. Minesweeping instruction, seamanship, wireless telegraphy and signal exercises comprised the specialist training on board.

H.M.C.S. *Armentieres* and *Thiepval* carried out similar duties to the minesweepers stationed at Halifax. While on training duty, these ships also carried out life-saving patrol off Bamfield, B.C., from December 1, 1928, to March 1, 1929, and seal patrol during May and June, 1928.

The ships also alternated in assisting H.M.C.S. *Vancouver* during gunnery and torpedo exercises. They also took part in combined exercises between the Naval, Military, and Air Forces during one week in August, 1928.

New Construction

The Canadian Government has awarded to Messrs. J. I. Thornycroft & Company, Limited, of Southampton, England, a contract for the construction of two modern destroyers to be completed in 1931 for service in the Royal Canadian Navy.

The dimensions of the new ships will be as follows:—

Length (water line)	316′
Width	32′ 3″
Depth	18′ 9″
Displacement (standard)	1,300 tons
Displacement (load)	1,700 tons
Shaft horse-power	32,000
Guaranteed speed	35 knots
Complement (officers and men)	152

The ships will be fitted with machinery of the latest type capable of economical running at all speeds.

They will be of latest Admiralty design specially adapted for service in Canadian waters and for training purposes.

The total cost of both ships, including armament, will be $3,350,000.

Disposal of H.M.C.S. "Patriot" and "Patrician"

The obsolete destroyers *Patriot* and *Patrician*, which were placed out of commission in December, 1927, have now been sold to shipbreakers.

As these ships were presented to Canada by the Admiralty as a free gift in 1920, the net sum realized from their sale has been transferred to the Imperial treasury.

3. R.C.N. BARRACKS

Halifax

The naval barracks at Halifax comprises the following:—

Officers' Quarters.—The large building formerly known as Admiralty House was equipped as an officers' mess in 1927, and provides living quarters for officers of the Royal Canadian Navy stationed at Halifax and for officers of the R.C.N.R. and R.C.N.V.R. undergoing training. The Officers' Mess grounds comprise 14 acres of land. Part of the land is used for naval recreational purposes and the remainder is reserved and available for future naval expansion, if required.

Barracks Building.—This building under Admiralty jurisdiction was a naval hospital. On organization of the Royal Canadian Navy in 1910, the building was remodelled and utilized as a naval college. In the Halifax explosion of 1917 the building was badly damaged and was abandoned, the Naval College being transferred to Esquimalt. In 1920 when the naval service of Canada was reorganized on a peace basis, the building was reconditioned and organized as a youths' training establishment. Upon amalgamation of the Naval, Military and Air Forces to form the Department of National Defence in 1922, the Youths' Training Establishment was closed and the building was fitted as a barracks for officers and ratings. Since 1927 it has been used as living quarters for petty officers and men only.

In addition to living quarters the building provides accommodation for a wireless telegraphy and signal school, schoolroom for academic training, ships' canteen and office accommodation for the Senior Naval Officer and his staff.

The Barracks organization also includes the following:—

Houses Nos. 11 and 12, which provide living quarters for chief petty officers.

House No. 10, which is fully equipped as Naval Medical quarters.

Gun Battery, containing gunnery instructional appliances and fire control apparatus.

Drill Hall, which includes a drill room, gymnasium, and shooting gallery.

Seamanship building, containing a seamanship lecture room and seamanship instructional appliances.

Engineering Workshop, providing accommodation for repair work carried out by R.C.N. ratings, and also engineering instructional equipment for training naval permanent and reserve forces.

Mining School building, containing accommodation and instructional equipment for mining instructional classes.

Torpedo and Electrical building, containing accommodation and instructional equipment for torpedo and electrical instructional classes.

Boat House, providing accommodation and facilities for repairing boats in use by ships and establishments of the Royal Canadian Navy.

Parade ground, for outdoor physical and disciplinary training.

The complement of R.C.N. Barracks comprises 17 officers and 156 ratings. Specialist officers in gunnery, torpedo and signalling as well as ratings holding high non-substantive ratings in these branches are borne on the staff for executive and instructional duty. A large percentage of the ratings on the complement are new entries undergoing training in the various branches, including gunnery, torpedo, signalling, wireless telegraphy, seamanship, physical and recreational, engine room, stoke-hold and mechanical training.

R.C.N. Barracks, Esquimalt

R.C.N. Barracks, Esquimalt, is organized on the site of the Naval Hospital grounds, across the harbour from Esquimalt Dockyard.

The property comprises ten acres of land and the following buildings:—

Naval Barracks.—This building provides living quarters for naval ratings on the west coast and for reserve ratings attending naval training; a wireless telegraph and signal school with instructional equipment; an academic school in charge of a qualified civilian schoolmaster; medical quarters, including a medical inspection office and sick quarters; an office for the Master-at-arms of the Naval Base; an office for the victualling staff; a canteen.

Officers' Mess.—This building provides living quarters for reserve officers undergoing naval training and for officers of the Royal Canadian Navy except the Senior Naval Officer.

Senior Naval Officer's Residence.—A separate house is allocated to the Senior Naval Officer as a residence.

Office Buildings.—The Senior Naval Officer has a one-story building for office accommodation for himself and his clerical staff.

The Naval Intelligence office, Consulting Engineer's office and Reserve office are contained in a separate one-storey building, and in similar buildings the Accountant office, Ships' office and First Lieutenant's office are accommodated.

Gun Battery.—A large building was built and fitted as a gun battery in 1922, and contains gunnery instructional appliances, and guns up to 6-inch calibre.

Fire Control Building.—This building contains modern fire control instruments and instructional appliances.

Gymnasium.—This building is fitted with complete equipment for physical training.

Signal Cabin.—The Signal Cabin is fully equipped with signal flags for use in ships and establishments at Esquimalt.

Electrical Instructional Building.

Wireless Telegraph Building.—This building contains the wireless sets in service use.

Workshop Building.—This building provides accommodation for shipwright and electrical artificers, and in it all repair work coming under the respective branches is carried out.

Torpedo and Mining.—Complete instructional gear contained in this building provides facilities for shore training in torpedo and mining.

Ordnance Artificers' Workshop.—Contains the machinery and tools necessary to carry out all repairs on guns.

In addition to the above establishments, the base is provided with a guard room and garage.

The base is in process of expansion by the addition of the following new buildings now under construction.

Torpedo School.—The new Torpedo School, when completed, will replace the present Mining and Torpedo building.

Canteen.—The present canteen, which is in the Barracks building, is too small to provide proper accommodation, and is unsuitably located. The new canteen building, which is now under construction, will relieve congestion in the barracks and will add greatly to the comfort and indoor recreational facilities of naval ratings serving at Esquimalt.

The Naval Base at Esquimalt is now well developed, and training accommodation and equipment are well up to requirements.

4. H.M.C. DOCKYARDS

The Naval Dockyards at Halifax and Esquimalt are in charge of a civilian manager.

The manager is responsible for the internal organization and management of the dockyard and of all civil personnel. He is also responsible for the enforcement of all fire and police regulations.

He is in charge of works including all contracts, maintenance of equipment, buildings, grounds, wharves, and for repairs to ships. In dealing with repairs to ships, however, he has available technical naval officers to assist him in an advisory capacity.

The manager is also responsible for all expenditure in connection with the supply of water, electric power, gas, etc., and for telephone services including not only the dockyard but also the Naval Barracks and armament supply establishments.

The staffs at the dockyards are civilian and are divided into Administrative, Accounting, Stores, and Armament Supply branches.

H.M.C. Dockyard, Halifax

H.M.C. Dockyard property comprises 23½ acres of land situated on the water front of Halifax Harbour and the following buildings: Office buildings, machine shops, coppersmith shops, carpenter shops, boat-building shops, boiler shops, blacksmith shops, electrical shops, gun mounting shops, paint shops, timber stores, boat stores, store room buildings.

This establishment has functioned throughout the year as a repair base, and stores depot. All repairs required have been carried out to H.M.C. ships and to buildings and equipment at Halifax Naval Base.

The dockyard also provided winter quarters for ships of the Marine and Fisheries Department, Pensions and National Health Department, and National Revenue Department.

Refits for ships of the Marine and Fisheries, National Revenue and Pensions and National Health Department were carried out. The cost of this work, which was met from appropriations for those departments, amounted to $20,686. Repairs and stores on repayment were also provided for ships of the United States ice patrol.

Stores were also supplied on a repayment basis to H.M. ships cruising in Canadian waters.

On July 2, 1928, H.M.S. *Dauntless* grounded at the entrance to Halifax Harbour. Every possible assistance was rendered by the Canadian Navy and

Dockyard officials. The personnel were taken off the stranded ship by H.M.C. ships, and all possible stores and equipment, including ammunition, were salvaged and cared for by the dockyard.

The Admiralty have expressed appreciation of the assistance rendered by officers and men of the Royal Canadian Navy.

H.M.C. Dockyard, Esquimalt

Esquimalt Dockyard comprises 30 acres of land situated on the water front at the eastern side of the entrance to Esquimalt Harbour.

The dockyard is organized with shops, stores and offices similar to Halifax Dockyard.

Esquimalt Dockyard has functioned as a repair base and stores depot.

5. NAVAL INTELLIGENCE

The Naval Intelligence Division of the department has carried out its functions as a part of the world wide Admiralty Intelligence System in a satisfactory manner.

The closest co-operation has been maintained with Intelligence divisions of the other defence services, and also with other units of the Admiralty organization. Valuable assistance in the compilation of reports has been given by other Government departments in the form of statistical and other information.

Reports have been compiled on various matters of naval and marine interest, special study having been devoted to the oil requirements of the Dominion.

6. NAVAL STORES

The supply of stores to H.M.C. ships and establishments was carried out during the year with continued success. As in past years, economy combined with maximum efficiency have been the guiding principles in this work.

The high state of efficiency of all store depots at Halifax and Esquimalt has been maintained. The stores personnel at the depots have continued to render very satisfactory service, whether in the performance of their routine functions or in coping with any extraordinary conditions that have arisen.

One feature of the year's activities was the greatly increased supply of stores to vessels of the Department of National Revenue. Having in mind that the existing organization can handle this work without inconvenience or added cost, it will undoubtedly prove advantageous to all concerned, as it tends to eliminate duplication of supply systems and results in a larger turnover of stock. Supplies have also been made to other Departments and to the British Admiralty as in past years.

Numerous necessary changes have been made in the different regulations as affecting the various ramifications of supply. New patterns of stores have been adopted as necessary with due regard to the expenditure of stocks of the superseded articles.

The two destroyers, *Patriot* and *Patrician*, having been paid off and returned to the British Admiralty, these vessels were sold by the department. Tenders were distributed to every known person or firm likely to be interested, which resulted in the sale of the *Patriot* to Messrs. Thos. W. Ward, Limited, of Sheffield, England, and of the *Patrician* to Messrs. Neider & Marous, of Seattle, Washington. The amounts realized on behalf of the Imperial Government were $14,135.53 and $10,888.88 respectively. Prior to their sale all stores and fittings which could be utilized for training or instructional purposes were removed and taken to stock.

The transfer of a number of naval reserve properties to the Department of Interior for administration was made, where the immediate possession of such properties was not vital to naval interests. The leasing of other properties which remained under the control of the department also received attention.

Naval and Victualling Stores

The activities of the Naval and Victualling Stores Division during the past year were slightly increased due to the increased complements and issues made to other Government departments.

The main functions of this division have to do with the provision, issue and accounting of all naval stores, clothing and provisions both for the R.C.N., R.C.N.V.R. and R.C.N.R. Stocks are maintained under experienced naval store officers at H.M.C. Dockyards, Halifax and Esquimalt. In addition to the stocks for the ordinary requirements of the authorized personnel and ships of the R.C.N. and Reserve forces, certain war reserves are maintained and provision is made to assist other Government departments as requested from time to time.

The stocks of the naval and victualling stores which include uniforms, mess traps and provisions at the close of the fiscal year 1928-29 amounted to $677,771 at Halifax and $346,939.09 at Esquimalt.

Supplementing the stores supplied through the dockyards, standing contracts were arranged through the Director of Contracts for the supply of fresh provisions and for certain other items which are drawn direct by the ship or establishment requiring them. Occasion has also been found during the year to extend similar facilities to visiting Imperial warships as well as to ships of other Government departments. Purchases were made on behalf of H.M. Dockyard, Bermuda, which resulted in large shipments of valuable supplies, including lumber and gases.

Issues of naval stores to H.M.C. ships and establishments are controlled through a system of allowances, which not only controls the quantities allowed but the patterns of articles which may be used. Issues are also made under standing regulations for authorized refits, repairs, new constructions, etc. Kits are supplied ratings in accordance with the uniform regulations and the victualling of the naval personel is done on a standard scale of rations. Commissioned officers, however, receive an allowance in lieu of provisions, being the cost of the standard rations as issued in the general mess.

The value of naval and victualling stores, other than those obtained on direct contracts, was as follows:—

HALIFAX DOCKYARD

(Not including naval armament stores)

Value of stores received	$ 159,581 88
Value of stores returned from ships, etc	23,428 01
Value of stores issued	201,382 99

ESQUIMALT DOCKYARD

(Not including naval armament stores)

Value of stores received	75,477 04
Value of stores returned from ships, etc	16,850 00
Value of stores issued	119,152 54

The value of the supplies taken up direct by H.M.C. ships and establishments on the standing contracts for fresh provisions, fuel, laundry, etc., in 1928-29 were:—

East coast	$ 40,828 00
West coast	43,230 00

After trials, contracts were arranged at Halifax and at Victoria and Vancouver for the supply of alternative commercial grades of fuel oil to H.M.C. destroyers. While this provision meets the present situation, it is still necessary to provide for an immediate reserve of the proper fuel oil for destroyers, and consideration is being given to this point.

The coal used during the year both for heating and steaming was as follows:—

Halifax: 580 tons Welsh anthracite, 1,880 tons bituminous (Canadian).
Esquimalt: 1,748 tons bituminous (Canadian), (including contracts on coast of Vancouver island).

Certain rearrangements in the storehouses at Halifax Dockyard were made to give increased accommodation to other branches and also due to the state of some of the storehouses. The stone storehouses at Halifax are very old and the majority of the others were constructed of wood after the Halifax explosion. The construction of a modern storehouse would overcome this situation and greatly facilitate storekeeping. The storehouses at Esquimalt are in good condition, and it is not anticipated that any costly repairs will be necessary for some time.

At Halifax Dockyard, in addition to the routine supplies to H.M. ships, considerable assistance was given at the time of the stranding of H.M.S. *Dauntless*.

The Department of National Revenue also had a number of the preventive cruisers refitted and stores totalling in value $25,760 were handled for these cruisers alone.

The returns of stores to both dockyards were augmented this year as a result of preparing *Patriot* and *Patrician* for sale. As in the past year, a few sales or transfers to other Government departments were made of unserviceable or obsolete stores not required by this department.

Stocktakings were made at both dockyards in accordance with a biennial program whereby the entire stock is taken within the two year period for stores which are frequently replenished stock is taken twice. This program was supplemented by test stocktaking made by stores officers from Ottawa. The discrepancies disclosed were comparatively few.

The store accounts at the dockyards, as examined under a system of concurrent audit, were found to have been kept very accurately, any discrepancies discovered being of a minor nature and readily adjusted. The store accounts from ships and establishments were also examined and found to be satisfactory; the stores supplied being properly accounted for with no serious deficiencies.

The victualling of the enlisted personnel under the system of general messing was carried out satisfactorily during the year. Including the crew of H.M.S. *Dauntless*, who were accommodated in the R.C.N. Barracks, Halifax, 546,030 meals were served at an average cost of 16 cents a meal. Victualling accounts were examined to ensure that the expenditures were not in excess of the governing scales and that while the cost was kept low, an adequate and varied dietary suitable for naval requirements was provided.

Special reserves, such as minesweeping stores, examination service stores, port war signal stations reserve, submarine mine net defence reserves, etc., were maintained in a state of efficiency and were replenished, particularly in the case of minesweeping stores by securing more modern gear to replace obsolete patterns which were unserviceable through use and age.

A stores inspection was made of all the R.C.N.V.R. units by a stores officer. Stock was taken of the stores of each company and the inventories corrected accordingly. The discrepancies disclosed were of a minor nature throughout. The uniform clothing was checked and a new system of accounts installed to facilitate the work of the company officers. The results of this inspection have been very satisfactory and the installation of the new system for clothing will add to their efficiency.

Naval Armament Supply

This division is responsible for the supervision and control of all matters pertaining to the provision, receipt, issue, care and maintenance, repair, testing, examination, accounting and audit of all naval armament stores, comprising ordnance, ordnance stores, ammunition, torpedoes, torpedo stores, paravanes mines and depth charges, in connection with the Canadian Naval Service and Imperial Service at Halifax and Esquimalt.

Armament Supply Depots maintained at Halifax and Esquimalt comprise storehouses where the necessary facilities for the care, issue and receipt of guns, gun mountings, and torpedoes are available; magazines for the proper stowage, care and maintenance of the respective classes of explosives; and workshops for carrying out the necessary repairs and alterations to ordnance and ordnance stores authorized by the list of changes in war material.

At Halifax, the naval portion at the Joint Service Magazines, Bedford Basin, is now practically complete with the exception of one small building for extracting shell and a few minor fittings in existing buildings. These will be completed next year. The naval magazines now comprise twenty-three buildings. The guarding of these magazines has been undertaken by a detachment of the R.C.M.P. and the necessary accommodation provided. An inspection by a representative of the Commander in Chief, America and West Indies Squadron, is made whenever opportunities offer. The reports of these inspections have been very satisfactory.

The new 60-ton ammunition lighter built for the department for use at Halifax has been delivered and proves a most valuable addition to the equipment of the depot.

At Esquimalt the magazines which are located on Cole Island are in a bad condition generally and in no way conform to the regulations. Although the quantities of explosives at present stored there are small, the fact that the buildings are in such poor condition and only a few feet apart, constitutes a risk which should not be accepted any longer than is absolutely necessary.

The torpedo workshops at Halifax and Esquimalt have been included as a part of the Armament Supply Depots. The work of repairs, overhauls, tests, etc., is carried out under the joint supervision of the Consulting Engineers and the Naval Armament Supply Officers.

The Halifax depot this year experienced the greatest strain on its organization since its inception, owing to certain major operations which have been carried out besides the normal functions. As a consequence the year's work has been of exceptional interest and has afforded invaluable experience to the entire depot staff.

From the point of view of organization at Halifax, the principal feature was the removal of all explosives (approximately 200 tons) from George's Island to the Bedford Basin magazines. This work was completed in eight days and only small costs were incurred for additional labour.

When H.M.S. *Dauntless* grounded outside Halifax Harbour, the depot co-operated in hoisting out her guns, mountings, and torpedo tubes and prepared them for reissue. All ammunition and armament stores were received into store and the whole of her ammunition outfit (approximately 120 tons) was examined, repaired, etc., with the result that the inevitable loss due to contamination by oil and water was reduced to a minimum. In addition twelve torpedoes were overhauled. cleaned, and reissued in a serviceable condition. This work was completed in approximately four months.

The stocks of armament stores at Halifax and Esquimalt are maintained in an efficient manner and have been depleted of all obsolete and unserviceable stores. Stock provision for the requirements of the Canadian naval service is

made under an agreement with the British Admiralty to maintain sufficient reserves of ammunition for issue to H.M.C. ships on repayment as required. Under this agreement the storekeeping of all Imperial stocks, whether for ultimate issue to Imperial or Canadian services, is undertaken by the department in return for the provision of the necessary reserves by the Admiralty.

The store accounts of both depots, and of ships and establishments, have been kept and rendered in a satisfactory manner, as shown by the audit thereof.

The following is the value of receipts and issues made during the year, exclusive of all transactions from Imperial stocks:—

Naval Armament Supply Depot, Halifax—

Receipts	$ 94,395 00
Returns	70,236 00
Issues	95,229 00

The above issues are exclusive of the value of five torpedoes, $35,000, issued to H.M.C.S. *Champlain* in lieu of five others returned for overhaul.

Naval Armament Supply Depot, Esquimalt—

Receipts	$ 27,898 00
Returns	11,063 00
Issues	18,565 00

The various R.C.N.V.R. units were supplied with new rifles purchased the previous year, in addition to the necessary stores for training.

The stocks of armament stores, both Imperial and Canadian, were verified under a system of continuous stocktaking, the results of which were very satisfactory.

Purchases

As in past years, assistance was afforded the Contracts Branch whenever possible in connection with the purchase of stores required for the Naval Service. Decisions have been given on technical questions entering into such purchases.

At the dockyards local purchase was made of such stores as are required in an emergency or which are of such a nature as to be best obtained locally. In all instances competitive tenders were invited.

The value of local purchases made at the dockyards during the year amounted to $69,788 at Halifax and $28,861 at Esquimalt.

Local purchases were similarly effected by H.M.C. ships and establishments, comprising for the greater part fresh and miscellaneous provisions not issued by the dockyards, and on the basis of standing contracts arranged by the department from headquarters.

During the year the total value of naval, victualling and armament stores purchased on account of the Naval Service, by local purchase and otherwise, for delivery to the store depots and to the service direct, amounted to $592,558.

7. FINANCIAL STATEMENT

The attached statements for fiscal year 1928-29 show a total expenditure of $1,837,548.64. There was a revenue during the year of $14,347.05, derived from refunds, rentals, discharges by purchase, sale of stores, etc., also refunds on account of demobilization, previous years, $157.91.

STATEMENT OF APPROPRIATION ACCOUNTS FOR FISCAL YEAR 1928-29

—	Appropriation	Expenditure	Balance unexpended
	$ cts.	$ cts.	$ cts.
Naval Service	2,725,000 00	1,836,487 65	888,512 35
Adjustment of war claims	5,000 00	1,060 99	3,939 01
	2,730,000 00	1,837,548 64	892,451 36
Imperial Government (Special Account)—			
Disbursements	130,865 68		
Carried from 1927-28	9,037 16	139,902 84	
Less—Reimbursements and credits	115,907 17		
Transferred to 1929-30	23,995 67	139,902 84	

STATEMENT OF REVENUE FOR FISCAL YEAR ENDED MARCH 31, 1929

Casual Revenue:—			
Refunds previous years expenditure		$ 3,222 27	
Rents:—Dockyard residences	$ 246 00		
Naval Reserve plots	648 21		
Miscellaneous	12 00		
		$ 906 21	
Sale of surplus and condemned stores		150 25	
Discharges by purchase		985 12	
Miscellaneous		183 88	
			$ 5,447 73
Naval pensions			$ 8,899 17
Premium, discount and exchange			0 15
			$ 14,347 05
Demobilization, previous years			$ 157 91

SUSPENSE ACCOUNTS, SHOWING VALUE OF WORK DONE AND MATERIAL SUPPLIED FOR ACCOUNT OF CANADIAN GOVERNMENT DEPARTMENTS, BRITISH ADMIRALTY AND OTHERS

—	Dr.	Cr.	Balance transferred to 1929-30
	$ cts.	$ cts.	$ cts.
British Admiralty	133,882 04	109,886 37	23,995 67
British Ministry of Shipping	6,020 80	6,020 80	.....
Department of Marine and Fisheries	10,992 85	10,623 92	368 93
Department of Pensions and National Health	9,645 86	5,038 81	4,607 05
Department of Interior	3 50	3 50	.....
Department of Indian Affairs	10 37	10 37	.....
Department of National Revenue	76,648 15	66,244 62	10,403 53
Department of Nationa Defence (Militia and Air Services)	26,018 81	25,539 72	479 09
Department of Public Works	2,024 66	1,482 12	542 54
Department of Railway and Canals	339 00	329 30	9 70
Department of Royal Canadian Mounted Police	834 11	798 76	35 35
Government of Newfoundland	166 92	166 92	.....
Government of Australia	176 24	174 24	2 00
United States Government	36 18	36 18	.....
Dominica Government	26 00	.....	26 00
Miscellaneous	123,451 85	130,296 31	Cr. 6,844 46
	390,277 34	356,651 94	33,625 40

STATEMENT OF EXPENDITURE UNDER THE NAVAL APPROPRIATION FOR THE FISCAL YEAR ENDED MARCH 31, 1929

Ship or Establishment	Pay and allowances	Stores and allowances	Medical services	a. Martial law b. Training and recruiting	Repairs and maintenance c. New buildings	Miscellaneous effective services	Non-effective pay	Advances, suspense, etc.	Total	Grand total
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
H.M.C.S. *Champlain*	97,772 08	68,807 48	2,804 31	(a) 36 21	11,030 47	1,988 86	768 95	.....	183,208 36	
" " fuel	.....	24,778 48	.....	.....	.....	.....	.....	.....	24,778 48	207,986 84
Minesweeper *Festubert*	20,812 78	10,707 86	60 00	.....	5,968 52	128 25	.....	.....	37,677 41	
" " fuel	.....	3,287 20	.....	.....	.....	.....	.....	.....	3,287 20	40,964 61
Minesweeper *Ypres*	22,228 80	10,379 17	124 45	.....	3,842 13	224 12	1,091 80	.....	37,890 47	
" " fuel	.....	2,606 43	.....	.....	.....	.....	.....	.....	2,606 43	40,496 90
H.M.C.S. *Vancouver*	92,754 42	44,183 16	2,531 39	(a) 27 82	21,994 19	3,262 05	.....	.....	164,753 03	
" " fuel	.....	26,133 91	.....	.....	.....	.....	.....	.....	26,133 91	190,886 94
Minesweeper *Armentières*	24,938 30	9,238 86	775 64	(a) 14 13	6,706 18	271 03	364 00	.....	42,308 14	
" " fuel	.....	3,709 80	.....	.....	.....	.....	.....	.....	3,709 80	46,017 94
Minesweeper *Thiepval*	23,380 63	9,111 86	250 89	(a) 7 26	5,774 63	667 22	.....	.....	39,192 49	
" " fuel	.....	3,636 19	.....	.....	.....	.....	.....	.....	3,636 19	42,828 68
Headquarters	31,548 30	1,107 51	482 30	.....	.....	13,410 92	.....	.....	.....	46,549 03
Canadian officers and men overseas	69,832 24	5,986 94	1,086 34	.....	.....	29,827 25	.....	.....	.....	106,732 77
Barracks—					48,941 84					
Halifax, N.S.	159,828 75	100,358 20	7,807 16	(a) 88 96	(c)31,166 00	15,615 13	2,456 45	.....	.....	366,262 49
				(b) 2 50	(c)30,308 39					
Esquimalt, B.C.	143,577 38	76,437 30	5,933 90	(a) 343 47	12,048 83	16,714 31	1,153 75	.....	.....	286,519 83
Intelligence—										
Headquarters	10,199 15	132 40	150 00	.....	.....	3,513 85	.....	.....	.....	13,995 40
Halifax, N.S.	4,688 75	160 23	39 00	.....	80 74	340 99	.....	.....	.....	5,309 71
Esquimalt, B.C.	5,340 50	110 60	.....	.....	81 00	644 27	.....	.....	.....	6,176 37
R.C.N. Volunteer Reserve:—										
General account	.....	1,291 83	.....	.....	.....	167 45	.....	.....	1,459 28	
Halifax	3,259 16	1,281 43	18 00	.....	21 03	855 43	.....	.....	5,435 05	
Charlottetown	2,757 68	1,071 17	.....	(b) 92 00	17 00	833 95	478 80	.....	5,250 60	
				(a) 4 68						
St. John	3,404 64	1,280 56	.....	(b) 50 00	233 97	1,228 64	577 60	.....	6,780 09	
Quebec	3,035 04	1,360 37	.....	(b) 163 44	520 77	1,702 16	.....	.....	6,781 78	

Montreal	5,334 49	286 33	28 00			580 81	3,660 34	1,170 40		11,060 37		
Ottawa	2,867 95	2,104 89	32 00			108 00	2,007 13			7,119 97		
Toronto	7,819 25	4,779 71	20 00	(b)	131 50	343 16	5,099 55	1,117 20		19,310 37		
Hamilton	4,299 66	2,061 31	50 50	(b)	68 00	140 40	2,465 15	577 60		9,662 62		
Winnipeg	9,261 78	4,459 16	38 44	(b)	61 00	434 14	8,143 33	501 60		22,899 45		
Regina	4,384 70	2,435 67	24 00	(b)	31 00	202 12	2,794 11			9,871 60		
Saskatoon	4,182 25	1,795 03	34 00			48 00	2,819 02			8,878 30		
Edmonton	3,526 95	1,647 71	6 00				2,174 20	539 60		7,894 46		
Calgary	3,274 70	1,425 50	80 00			282 00	1,970 04	539 60		7,571 84		
Vancouver	3,838 20	1,790 48	55 77	(b)	28 00	357 64	999 90			7,069 99		
Prince Rupert	2,436 20	712 71	4 00	(b)	27 50	455 91	1,611 37	577 60		5,825 29		
											142,871	06
R.C.N. Reserve:—												
General account							79 65			79 65		
Halifax	3,672 85	1,308 21	36 00			33 25	339 59	2,767 00		8,156 90		
St. John	340 66	59 40	26 00	(b)	3 28		34 75	440 00		904 09		
Lunenburg		Credit 12 57					2 64	45 32		35 39		
Charlottetown	1,794 40	450 41	184 00	(a)	4 62		376 94	1,108 00		3,924 62		
				(b)	6 25							
Montreal	1,744 05	533 40					650 05	1,313 00		4,240 50		
Quebec	1,694 25	925 89	5 00	(b)	77 18	40 80	915 67	2,441 00		6,099 79		
Vancouver	652 40	18 79		(b)	1 00		31 35	1,195 00		1,898 54		
Prince Rupert	364 60	212 73					285 87	346 00		1,209 20		
Victoria	795 35	190 52					7 48	324 00		1,317 35		
											27,866	03
Government Department transfers		166 26									166	26
General account		136 20	783 20	(b)	161 40		8,012 41	685 75	46,077 20		55,856	16
H.M.C.S *Patriot*	Cr. 3 16	Cr. 10,172 78				95 82	1,051 69				Cr. 9,028	43
H.M.C.S. *Patrician*		Cr. 189 50				Cr. 168 00					Cr. 357	50
H.M.C.S. *Saguenay* (d)							1,315 26				1,315	26
H.M.C.S. *Skeena* (d)							1,315 25				1,315	25
Halifax, N.S.—												
Dockyard							1,240 96				1,240	96
Stores		Cr. 23,317 55									Cr. 23,317	55
Supply Base:—												
Operating expenses		41,749 26				7,452 05	5,211 24			54,412 55		
Percentages Cr.		Cr. 14,586 49								Cr.14,586 49	39,826	06
Repair Base:—												
Operating expenses		1,063 00				33,010 02	9,654 09			43,727 11		
Percentages Cr.						Cr.33,925 78				Cr.33,925 78	9,801	33
Fleet General		315 00				20,338 44	5,804 38				26,457	82
Armament Supply Depot:—												
Stores		35,533 85									35,533	85
Operating expenses		47,929 40				17,952 50	3,743 99			69,625 89		
Percentages Cr.		Cr. 8,055 64								Cr. 8,055 64	61,570	25
Naval Cemetery						90 85					90	85
Vessels in reserve		Cr. 77 46				231 30	42 85				196	69

STATEMENT OF EXPENDITURE UNDER THE NAVAL APPROPRIATION FOR THE FISCAL YEAR ENDED MARCH 31, 1929—*Concluded*

Ship or Establishment	Pay and allowances	Stores and allowances	Medical services	a. Martial law b. Training and recruiting	Repairs and maintenance c. New buildings	Miscellaneous effective services	Non-effective pay	Advances suspense, etc.	Total	Grand total
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Esquimalt, B.C.—										
Dockyard						1,007 45				1,007 45
Stores		Cr. 28,608 91								Cr. 28,608 91
Supply Base:—										
Operating expenses		29,686 49			3,082 68	2,503 83			35,273 00	
Percentages Cr		Cr. 8,138 43							Cr. 8,138 43	27,134 57
Repair Base:—										
Operating expenses					12,927 33	5,228 00			18,155 33	
Percentages Cr					Cr.13,408 38				Cr.13,408 38	4,746 95
Fleet General					5,082 63	3,222 55				8,305 18
Armament Supply Depot:—										
Stores		20,838 24								20,838 24
Operating expenses		18,325 46			7,047 84	1,969 00			27,342 30	
Percentages Cr		Cr. 1,851 90							Cr. 1,851 90	25,490 40
Naval Cemetery					1,158 14	4 68				1,162 82
Vessels in reserve					585 48	2,524 29				3,109 77
Comox Rifle Range					1,165 52	3 80				1,169 32
	781,640 13	535,088 72	23,470 29	(a) 527 15 (b) 904 05	183,005 97 (c)61,474 39	181,719 73	22,580 02	46,077 20		1,836,487 65

(d) New Destroyers under construction at Southampton, Eng., John I. Thornycroft & Co., Limited, Contractors.

8. GENERAL

The Naval Service of Canada has now reached a stage of development, which has effectively confirmed its position in the defence schemes of the Dominion. The co-ordination in staff work with the Militia and Air Force is largely responsible. The inclusion of all three forces in the one department, and the attendance of officers, now on Headquarters' Staff, at the Imperial Defence College, have undoubtedly been contributory factors of great importance to this co-ordination. The granting to the officers and men of the Royal Canadian Navy of a Service Pension has had the most beneficial effect on the personnel.

The Reserve Forces, which were organized in 1923, are well advanced through the organization stage, and are taking their place in the Defence Forces of Canada in the capacity of fully trained reserves.

The Permanent Naval Forces are also becoming more representative of Canada through the policy of filling vacancies, so far as possible, by entering young Canadians, and by advancing them, as they become qualified, to higher positions in the service.

The placing of contracts for the construction of two new destroyers also marks a definite advance, as heretofore no new ships have been commissioned for service in the Royal Canadian Navy.

The co-operation of the British Admiralty in placing at the disposal of the department the training facilities of R.N. establishments and H.M. ships has been of great value. Although the department refunds to the Admiralty the cost of this training, it saves large sums through not having to maintain large training establishments equipped with expensive gear necessary for advanced courses.

Similarly, the assistance rendered by ships of the America and West Indies Squadron, while *Champlain* was in company during the winter 1928-29, and also while those ships were cruising in Canadian waters during the summer of 1928 has enabled ratings of the Permanent Naval Force to gain experience in squadron manoeuvres, and R.C.N.V.R. ratings to train at sea.

During the summer of 1928, H.M.A.S. *Australia*, Flag Ship of Rear-Admiral G. F. Hyde, C.V.O., C.B.E., R.A.N., visited the east coast of Canada. Appropriate entertainment was provided by the naval authorities, and H.M.C. ships were in company with *Australia* whilst visiting several Canadian ports.

Upon his departure Rear-Admiral Hyde sent the following letter to the Senior Naval Officer, Halifax:—

"May I express to you and the other members of the Entertainment Committee, the appreciation of the Captain, officers and ship's company of H.M.A.S. *Australia*, and myself, for the full and excellent programme of entertainments arranged for us during our visit to Halifax.

"I would also like to congratulate you and your committee upon the admirable manner in which all arrangements were carried out, and to thank you personally for your invaluable assistance to my staff and myself both before and throughout our visit".

The health of the personnel has been excellent throughout the year, and no epidemic diseases have occurred.

I wish to express appreciation of the valuable services rendered by officers and men of the Permanent and Reserve Forces, officials and employees at H.M.C. Dockyards and employees on Headquarters' Staff.

I have the honour to be, sir,
Your obedient servant,

Commodore, R.C.N.,
Chief of the Naval Staff.

DOMINION OF CANADA

REPORT OF THE WORK

OF THE

DEPARTMENT OF

PENSIONS AND NATIONAL HEALTH

THE BOARD OF PENSION COMMISSIONERS FOR CANADA

AND

THE FEDERAL APPEAL BOARD

FOR THE YEAR ENDING MARCH 31

1929

OTTAWA
F. A. ACLAND
PRINTER TO THE KING'S MOST EXCELLENT MAJESTY
1930

To His Excellency the Right Honourable the Viscount Willingdon, G.C.S.I., G.C.M.G., G.C.I.E., G.B.E., Governor General and Commander in Chief of the Dominion of Canada.

MAY IT PLEASE YOUR EXCELLENCY:

The undersigned has the honour to present to Your Excellency the Annual Report of the Department of Pensions and National Health, including the reports of the Board of Pension Commissioners for Canada and the Federal Appeal Board, for the fiscal year ended March 31, 1929.

I have the honour to be,

Your Excellency's most obedient servant,

J. H. KING,

Minister of Pensions and National Health.

December 31, 1929.

97277—1½

THE DEPARTMENT OF PENSIONS AND NATIONAL HEALTH

MINISTER—The Hon. J. H. King, M.D.

DEPUTY MINISTER—Lt.-Colonel J. A. Amyot, M.B., Tor., C.M.G.

PENSIONS

Head Office .....Daly Building, Ottawa.

ASSISTANT DEPUTY MINISTER—J. W. McKee.

DIRECTOR OF MEDICAL SERVICES—Lt.-Colonel Ross Millar, M.D.

SECRETARY—E. H. Scammell, F.C.I.S.

FINANCIAL CONTROLLER—Captain G. W. F. Hodgins, M.C.

CHIEF ADMINISTRATIVE ASSISTANT—Major A. M. Wright.

DIRECTOR ORTHOPÆDIC APPLIANCES AND VETCRAFT—Major J. L. Melville, M.C.

DEPARTMENTAL PURCHASING AGENT—Major A. U. Meikle, M.C.

ARCHITECT—W. H. George.

CHIEF DENTAL OFFICER—D. D. Wilson. D.D.S.

SUPERINTENDENT OF EMPLOYMENT—D. F. Rowe.

CHIEF OFFICIAL SOLDIERS' ADVISER—Captain K. G. Macdonald.

District Offices—

"A" District, Province of Quebec—
Head Office, Labelle Building, Montreal, P.Q.
Branch Office, Merger Building, Quebec, P.Q. (Medical Clinic only.)

"B" District, Nova Scotia and Prince Edward Island—
Camp Hill Hospital, Halifax, N.S.

"C" District, Eastern Ontario—
Head Office, 3rd Floor, Daly Building, Ottawa, Ont.
Branch Office, Post Office Building, Kingston, Ont.

"D" District, Central Ontario—
Head Office, Christie Street Hospital, Toronto, Ont.
Branch Office, Duffield Building, Jackson Street, Hamilton, Ont.

"F" District, Western Ontario—
Head Office, Westminster Hospital, London, Ont.
Branch Office, 7 Metropolitan Building, Windsor, Ont.

"G" District, Manitoba—
Head Office, Commercial Building, Winnipeg, Man.
Branch Office, Customs Excise Warehouse, Port Arthur, Ont.

"H" District, Saskatchewan—
Head Office, Veteran Block, Regina, Sask.
Branch Office, Canada Building, Saskatoon, Sask.

"I" District, Alberta—
Head Office, 517 Eighth Avenue West, Calgary, Alta.
Branch Office, Strathcona Postal Station, Strathcona, Alta.

"J" District, British Columbia—
Head Office, Shaughnessy Hospital, Vancouver, B.C.
Branch Office, Post Office Building, Victoria, B.C.

"K" District, New Brunswick—
Lancaster Hospital, West Saint John, N.B.

Overseas Office—Canadian Building, Trafalgar Square, London, S.W.1, England.

BOARD OF PENSION COMMISSIONERS FOR CANADA

Office ..... Daly Building, Ottawa

CHAIRMAN—J. T. C. Thompson, K.C., D.S.O.
COMMISSIONERS—J. F. McQuay, M.D., J. F. Ellis, M.D.
CHIEF MEDICAL ADVISER AND ACTING COMMISSIONER—R. J. Kee, M.D.
SECRETARY—J. A. W. Paton.

FEDERAL APPEAL BOARD

Office ..... Elgin Building, Ottawa

CHAIRMAN—Colonel C. W. Belton, M.B., C.M.
COMMISSIONERS—C. B. Reilly, K.C., Lt.-Colonel J. Roy, M.C., Bruce L. Wickware, M.D., Captain C. W. E. Meath.
SECRETARY—Lt.-Colonel C. B. Topp, D.S.O., M.C.

NATIONAL HEALTH

Office ..... Elgin Building, Ottawa

CHIEF EXECUTIVE ASSISTANT—J. J. Heagerty, M.D., D.P.H.
SECRETARY—Major F. H. Brown, M.C.
CHIEF ACCOUNTANT—J. Anderson.
CHIEF, DIVISION OF QUARANTINE AND IMMIGRATION MEDICAL SERVICE—J. D. Pagé, M.D.
CHIEF DOMINION ANALYST—H. M. Lancaster, B.Sc.
CHIEF, LABORATORY OF HYGIENE—Norman MacL. Harris, M.D.
CHIEF, DIVISION OF CHILD WELFARE—Helen MacMurchy, M.D., LL.D.
CHIEF, NARCOTIC DIVISION—Colonel C. H. L. Sharman, C.M.G., C.B.E.
CHIEF, PROPRIETARY OR PATENT MEDICINE BRANCH—L. P. Teevens.
HOSPITAL ARCHITECT CONSULTANT—B. Evan-Parry, M.R.A.I.C.
CHIEF SANITARY ENGINEER—Captain G. H. Ferguson, M.C.

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INTRODUCTORY LETTER

TO REPORT OF THE

DEPARTMENT OF PENSIONS AND NATIONAL HEALTH

The Hon. J. H. KING, M.D., M.P.,
Minister of Pensions and National Health,
Ottawa.

SIR,—In accordance with your instructions, I have the honour to submit the attached report of work of the Department of Pensions and National Health, the Board of Pension Commissioners for Canada, and the Federal Appeal Board, for the fiscal year 1928-29.

The report is divided into four sections:—

(1) Department of Pensions and National Health, Pensions Division;
(2) The Board of Pension Commissioners for Canada;
(3) Federal Appeal Board;
(4) Department of Pensions and National Health, Health Division.

DEPARTMENT OF PENSIONS AND NATIONAL HEALTH

PENSIONS DIVISION

The department has no jurisdiction over the question of eligibility for pension, nor the assessment of the amount of disability present in any eligible case; all such matters come under the jurisdiction of the Board of Pension Commissioners for Canada. The department's activities cover the treatment of ex-soldiers who are now suffering from certain diseases or injuries ruled upon by the Board of Pension Commissioners as being related to service, and the administration work in connection with Pensions, Insurance, and other beneficial legislation as authorized by Parliament.

The number of new admissions to hospital for the year ending March 31, 1929, was greater than in any year since 1922.

The total number who received in-patient treatment during the year was 12,147, as against 11,030 in 1927-28. Treatments under the Out-patient Department have also increased from 102,580 to 104,091.

Of the number actually in hospital on March 31, 1929, 1,623 were in departmental hospitals, while 1,350 were in civilian institutions, making a total of 2,973.

Veterans' care cases have shown a steady increase, from 69 on March 31, 1928, to 115 on March 31, 1929, and to 176 at the present date.

The work done in the Orthopaedic and Surgical Appliances Branch continues to expand, and shows an increase in the number of limbs manufactured, and also a considerable increase in the minor orthopaedic appliances.

The department has continued to co-operate with the Dominion-Provincial Employment Service of Canada and the Montreal Rehabilitation Committee. The number of reported placements was greater than in the previous fiscal year.

The number of pensioners who were granted relief increased from 4,182 in 1927-28 to 4,647 in 1928-29.

At the end of the fiscal year 296 men were employed in the Vetcraft Shops, which are situated in Halifax, Montreal, Toronto, Hamilton, Winnipeg, Vancouver and Victoria. The intensive selling program of the department has resulted in greater demands for vetcraft products. It should be noted, however, that the variety as well as the market for those products, is comparatively restricted.

Vocational training has been granted where it has been considered beneficial; the results of probational training have been somewhat disappointing, but it is hoped that this measure will increasingly assist in placing industrial problem cases in permanent employment.

The reopening of the Returned Soldiers' Insurance in June, 1928, resulted in the receipt of 4,757 new applications up to the end of the fiscal year. These have since been increased to a total number to date 7,996. Of these 803 were refused, as the applicants did not have a reasonable expectancy of life. The number of policies in force on March 31, 1929, was 27,473, as against 25,010 on March 31, 1928. This has since been increased to 29,675 as of November 1, 1929, in a total sum of $66,009,301.

There has been a reduction in the number of claims for reimbursement, submitted by Workmen's Compensation Boards, in respect of accidents to employees who are pensioners of 25 per cent and upwards. The number of individual cases in which the department accepted liability was 137, involving an expenditure of $19,672.04, as against 247 cases involving an expenditure of $69,968.56 for the previous year. There is no way in which the number of claims, or their amount, can be governed, and already since March 31, 1929, the sum expended has been double that of the last fiscal year.

The general policy followed by the department is to abstain from any further building of new active treatment hospitals, but to take advantage of existing civilian facilities, thereby avoiding the duplication of medical activities. Extensions or additions to existing departmental hospitals are being made with a view to the accommodation of convalescent and veterans' care cases.

In the summer of 1928, the department was advised that civilian hospital accommodation in the city of Winnipeg would not cover the increasing number of soldier patients, and, therefore, steps were taken to provide additional room in the departmental hospital at Deer Lodge. The old wooden building was totally inadequate, and therefore a special modern brick and stone edifice was constructed, and has recently been occupied.

The general work of the Administrative, Secretarial and Medical Services of the department has been greatly increased. This general increase of work is due chiefly to the legislation and recommendations of the Parliamentary Committee of 1928, and to

(1) actual increase in the number of disability pensioners from 44,069, December 31, 1924, to 56,397 December 31, 1929;

(2) increasing number of ex-soldiers asking for consideration in respect to the relationship of their present disabilities to service, and therefore requiring periods of observation in hospital and careful examinations by the specialists of the department; and

(3) advancing age of present pensioners.

Under existing legislation the peak of this work has not yet been reached.

As was the case last year, the total expenditure of the department shows a substantial increase, the exact amount of which is $2,203,969.70 of which $1,990,269.17 was in respect to new pensions.

The following is an epitomized statement of the manner in which the funds appropriated by Parliament have been dealt with:—

Direct payments to men and dependents		$45,121,655 00
Payments for services to men and dependents		3,906,048 41
Capital expenditure		74,308 55
Stores purchased		495,460 42
Payments to outside organizations		53,341 58
Recoverable expenditures		492,156 54
		$50,142,970 50
Insurance premiums revenue	$1,462,469 19	
Casual revenue	200,534 21	1,663,003 40
		$51,805,973 90
Administration expense		1,538,152 72
		$53,344,126 62
Expense of the Federal Appeal Board and the Board of Pension Commissioners		283,934 90
		$53,628,061 52

DEPARTMENTAL ADMINISTRATION EXPENSE

General, Treatment, Pensions and Returned Soldiers' Insurance	$ 1,538,152 72
Percentage—Departmental administration	2.868%

ADJUDICATION OF PENSIONS

Board of Pension Commissioners	$109,319 69	
Federal Appeal Board	174,615 21	283,934 90
Percentage—Adjudication of pensions		.529%
Total administration and adjudication expense		$ 1,822,087 62
Percentage—All expense		3.397%

Board of Pension Commissioners and Federal Appeal Board

Summarized and complete details of the work of the Board of Pension Commissioners for Canada and the Federal Appeal Board are included in the sections of the report covering the activities of these boards.

National Health Division

The Food and Drugs Division, through its laboratories at Halifax, Montreal, Ottawa, Toronto, Winnipeg and Vancouver, has carried out an extensive investigation of food and drug preparations now on the market. Improvement is shown by manufacturers in their statements on labels of packages of food and drugs, and the protection of the purchasing consumer against false, exaggerated and misleading statements is being maintained. The same remark applies to the Proprietary or Patent Medicine Division in connection with medicinal preparations.

The work of the Narcotic Division has been carried on with a success which has been most marked, and it is felt that very material improvement has been effected in the control of both licit and illicit traffic in narcotics.

The Chief Sanitary Engineer of the department, through his division, reports material progress in the protection of the travelling public and the crews of vessels plying on the inland waters of Canada, against contaminated water supplies. It has now been possible to extend this service to the examination and control of water supplies carried on the various railroads.

The carrying out in Great Britain and on the continent of the medical examination of prospective emigrants to Canada, which was commenced in the latter part of 1927, is proving successful, as is evidenced from the figures contained in the report of the Division of Quarantine and Immigration Medical Inspection. Every effort is being made to have these examinations done with as little inconvenience as possible to intending emigrants.

During the past year the activities of the Laboratory of Hygiene have been extended to include the standardization of biological products coming under Parts II and III of the Food and Drugs Act.

The work performed by the Child Welfare Division has been of a progressive nature. The demands for copies of the report of the Inquiry on Maternal Mortality in Canada, which was carried out by that division, has necessitated a reprint.

I have the honour to be, sir,

Your obedient servant,

J. A. AMYOT,

Deputy Minister.

OTTAWA, December 31, 1929.

PENSIONS DIVISION

MEDICAL TREATMENT

The following tables indicate the number of patients treated and their distribution during the fiscal year ending March 31, 1929, with comparative statements covering previous years:—

STATEMENT SHOWING TOTAL TREATMENT STRENGTH OF DEPARTMENTAL INSTITUTIONS ACCORDING TO MEDICAL CLASSIFICATION ON MARCH 31, 1929

District	Institution	General		Mental		T.B.		Totals		Total strength
		In-pats.	Out-pats.	In-pats.	Out-pats.	In-pats.	Out-pats.	In-pats.	Out-pats.	
A.	Ste. Annes Hospital	82		260		24		366		366
B.	Camp Hill Hospital	110				6		116		116
D.	Christie Street Hospital	283	2	2		39		324	2	326
F.	Westminster Hospital	56		419		3		478		478
G.	Deer Lodge Hospital	59		2		2		63		63
I.	Col. Belcher Hospital	58				2		60		60
J.	Shaughnessy Hospital	141	5	3		19		163	5	168
K.	Lancaster Hospital	48		1		4		53		53
	Total	837	7	687		99		1,623	7	1,630

Treatment Only Patients

Of the total number of patients on the strength of the Department, 593 were undergoing treatment without compensation. These were distributed as follows: departmental institutions, 400; other institutions in Canada, 191, and in England, 2.

STATEMENT OF EX-MEMBERS OF THE ALLIED FORCES TREATED IN CANADA DURING THE FISCAL YEAR ENDING MARCH 31, 1929

—	On strength 31-3-28	Admissions	Discharged	Deaths	On strength 31-3-29
Australian	5	12	11		6
Newfoundland	5	7	7	1	4
New Zealand	1	3	3		1
South African	3	1	1	1	2
United States	11	20	21	2	8
Total	25	43	43	4	21

The following figures give the approximate number of admissions to hospital by the Military Hospitals Commission and the department to March 31, 1929:—

July 1, 1915 to December 31, 1916, by the Military Hospitals Commission, approximately	22,742
January 1, 1917, to March 31, 1918	28,258
April 1, 1918, to December 31, 1919, by D.S.C.R.	36,625
January 1, 1920, to December 31, 1920	23,591
January 1, 1921, to December 31, 1921	13,890
January 1, 1922, to December 31, 1922	10,015
January 1, 1923, to December 31, 1923	8,516
January 1, 1924, to March 31, 1924	2,461
April 1, 1924, to March 31, 1925	7,978
April 1, 1925, to March 31, 1926	7,710
April 1, 1926, to March 31, 1927	7,243
April 1, 1927, to March 31, 1928	8,191
April 1, 1928, to March 31, 1929	8,890
Total	186,110

CLINICAL TREATMENTS

May 1, 1919, to December 31, 1919	126,057
January 1, 1920, to December 31, 1920	447,142
January 1, 1921, to December 31, 1921	300,895
January 1, 1922, to December 31, 1922	216,991
January 1, 1923, to December 31, 1923	167,291
January 1, 1924, to March 31, 1924	42,156
April 1, 1924, to March 31, 1925	142,047
April 1, 1925, to March 31, 1926	134,248
April 1, 1926, to March 31, 1927	120,141
April 1, 1927, to March 31, 1928	102,580
April 1, 1928, to March 31, 1929	104,091
Total	1,903,639

SUMMARY OF TREATMENT STRENGTH

	General		Mental		T.B.		Totals	
	In	Out	In	Out	In	Out	In	Out
Departmental institutions	837	7	687		99		1,623	7
Institutions in Canada	493	2	365		297		1,155	2
Institutions in Great Britain	33	3	44	1	9		86	4
Institutions in U.S.A.	42	1	24		43		109	1
Out-patient class; attending office clinics		10				1		11
	1,405	23	1,120	1	448	1	2,973	25

ADMISSIONS, DISCHARGES, DEATHS AND TOTAL PATIENT STRENGTH

1928	Admissions			Discharges			Deaths	Total strength
	General	Mental	T.B.	General	Mental	T.B.		
April	616	5	64	700	4	84	18	3,136
May	549	11	74	694	5	99	32	2,940
June	581	9	90	597	11	118	21	2,873
July	547	9	55	661	13	67	24	2,719
August	613	4	77	747	9	79	24	2,554
September	538	4	78	515	9	62	21	2,567
October	755	7	65	606	13	59	28	2,688
November	678	4	64	494	10	54	26	2,850
December	626	12	61	466	4	54	22	3,003
1929								
January	951	20	106	773	6	56	41	3,204
February	751	14	76	735	2	59	39	3,210
March	673	16	87	862	7	86	33	2,998
Totals	7,878	115	897	7,850	93	877	329	

The above figures include ex-Imperials—Admissions	424
Discharges	481
Patient strength as at March 31, 1928	3,257
Patient strength as at March 31, 1929	2,998

Comparative Treatment Strength

The following statement shows the number of in-patients and out-patients as at the end of 1921, 1922, 1923, 1924, and the fiscal years ending March 31, 1925, 1926, 1927, 1928, and 1929:—

All Institutions—Year	In-patients	Out-patients	Total
December 31, 1921	5,053	287	5,340
December 31, 1922	4,014	293	4,307
December 31, 1923	3,619	125	3,744
December 31, 1924	3,347	80	3,427
March 31, 1925	3,452	77	3,529
March 31, 1926	3,039	58	3,097
March 31, 1927	2,805	34	2,839
March 31, 1928	3,200	57	3,257
March 31, 1929	2,973	25	2,998

Veterans Care Cases

On March 31, 1929, there were 115 men in departmental and other institutions under this authority, distributed as follows:—

District	Institution	On strength 1-4-28	Admissions	Transfers in	Transfers out	Discharges	Deaths	On strength 31-3-29
A	Ste. Annes Hospital, Ste. Anne de Bellevue, P.Q.	15	19	2	1	8	3	24
	Royal Victoria Hospital, Montreal, P.Q.	.....	.....	1	.....	.....	1	.....
B	Camp Hill Hospital, Halifax, N.S.	4	6	.....	.....	5	.....	5
C	Hotel Dieu Hospital, Kingston, Ont.	.....	.....	1	1	.....	.....	.....
D	Christie St. Hospital, Toronto, Ont.	16	24	5	7	11	1	26
	Muskoka Sanatorium, Gravenhurst, Ont.	.....	1	.....	.....	.....	.....	1
	Red Cross Hospital, Toronto Island, Ont.	.....	.....	4	4	.....	.....	.....
G	Deer Lodge Hospital, Winnipeg, Man.	7	7	4	4	3	.....	11
	Convalescent Home, Winnipeg Beach, Man.	.....	.....	1	1	.....	.....	.....
	General Hospital, Winnipeg, Man.	.....	.....	2	.....	.....	.....	2
I	Colonel Belcher Hospital, Calgary, Alta.	8	8	.....	.....	2	.....	14
J	Shaughnessy Hospital, Vancouver, B.C.	18	19	1	2	8	3	25
	Royal Jubilee Hospital, Victoria, B.C.	.....	.....	1	.....	1	.....	.....
	West Coast General Hospital, Pt. Alberni, B.C.	.....	.....	1	1	.....	.....	.....
K	Lancaster Hospital, Saint John, N.B.	1	10	.....	1	3	.....	7
	County Hospital, E. Saint John, N.B.	.....	1	1	1	.....	1	.....
	Totals	69	95	24	23	41	9	115

DENTAL SERVICES

The personnel of the Dental Division consists of the chief dental officer, dental surgeons, on full and part time salaries, dental mechanics, clerical staff, and dental representatives.

Dental clinics are located chiefly in departmental institutions.

Dental representatives supply necessary dental relief in localities not supplied by salaried operators, and are paid for such services according to the departmental schedule of dental fees.

Prior to the year 1928-29 dental treatment in the various districts was administered by the respective dental officers. During this year the administration of all dental services, except those actually supplied in departmental clinics, has been taken over by head office, thereby permitting the dental officers to devote their entire time to the patients directly under their care. The centralization of dental services supplied by dental representatives has resulted in a uniform type of treatment being supplied and has effected certain economies.

The review of original documents and files of men whose dental disabilities are brought before the Board of Pension Commissioners for ruling is now carried out by the chief dental officer at head office.

CLINICAL TREATMENTS AND PATIENTS COMPLETED 1928-29

—	Treatments	Patients
Departmental Clinics	32,517	1,334
Dental Representatives	3,038	318
United States Veterans' Bureau	673	65
Total	36,228	1,717

ORTHOPÆDIC AND SURGICAL APPLIANCES

This branch is responsible for the manufacture or supply of any prosthesis which a disabled ex-member of the forces has to wear on account of an injury or disease consequent upon his military service. These prostheses are issued, repaired or renewed at the expense of the department and services are rendered and close personal contact maintained through twelve orthopædic depot throughout the Dominion. Reciprocal arrangements exist for the care of our Canadians in the countries of the Allied Forces and for their beneficiaries in Canada.

The most modern type of Duralumin artificial leg is assembled and fitted from component parts supplied from England, but the department is developing the manufacture of these parts at the main Orthopædic Depot, Toronto, and in the near future the complete appliance will be produced in Canada. The standard willow leg is also issued where the occasion demands and artificial arm and hand appliances.

Other activities of this branch are the manufacture of orthopædic boots to fit the surgical requirements of each particular individual, artificial eyes and facial masks, body belts and braces, splints, etc., and the supply of glasses, wheel chairs, etc.

Appliances are also supplied to beneficiaries of the Workmen's Compensation Boards and those of other Government departments when ordered.

NUMBER OF VARIOUS APPLIANCES ISSUED BY THE ORTHOPÆDIC AND SURGICAL APPLIANCES DIVISION TO MARCH 31, 1929

—	Delivered prior to April 1, 1928				Delivered during April 1, 1928, to March 31, 1929				
	Dominion of Canada	Workmen's Compensation Boards of Canada	London, England	United States of America	Dominion of Canada	Workmen's Compensation Boards of Canada	London, England	United States of America	Total
Legs (all types)	9,043	166	579	273	415	21	25	30	10,552
Arms (all types)	2,731	193	69	17	84	10	2	5	3,111
Orthopaedic boots	54,232	141	1,088	467	5,763½	26	148½	67	61,933
Peg legs	1,537	94	11	2	25	14	1	.....	1,684
Optical supplies	27,284	291	370	353	1,580	67	59	30	30,034
Minor orthopaedic appliances	161,697½	1,351	5,498½	2,115	23,296	203½	756	301	195,218½
Repairs to legs	55,061	228	1,757	494	5,929	20	366	77	63,932
Repairs to arms	4,619	89	69	23	339	4	3	1	5,147
Repairs to boots	61,839	22	691	379	7,255	3	96	70	70,355
Repairs to all other appliances	14,127	24	370	47	1,201	3	24	9	15,805
Totals	392,170½	2,599	10,502½	4,170	45,887½	371½	1,480½	590	457,771½

EMPLOYMENT

The arrangement with the Department of Labour, whereby the Employment Service of Canada undertook to carry on the work formerly done by the department in finding employment for disabled ex-service men has been continued.

APPLICATIONS AND PLACEMENTS OF DISABLED EX-SERVICE MEN DURING THE FISCAL YEAR ENDING MARCH 31, 1929

EMPLOYMENT SERVICE OF CANADA

Placements—Permanent	6,282
Placements—Temporary	2,773
Cancellations	4,356
Unemployed	1,445
Total	14,856

MONTREAL REHABILITATION COMMITTEE

Placements—Permanent	319
Placements—Semi-permanent (1933)	568
Placements—Temporary	1,365
Cancellations	209
Unemployed	681
Total	3,142

EXPENDITURE

Salaries—$11,205.50. Office Expenses—$550.88. Total—$11,756.38.

SUMMARY

Comparative Statement of Applications and Placements of ex-service men during the fiscal year ending March 31, 1928-March 31, 1929.

Year ending	Applicants	Placements	Cancellations	Pending placements
March 31, 1928	16,896	9,706	4,766	2,424
March 31, 1929	17,998	11,307	4,565	2,126

SUMMARY—*Concluded*

Applications for assistance in obtaining employment increased 1,103.
The number of men for whom employment was found increased 1,601. This is partially accounted for by increased number of applicants.
The number of men who were shown as unemployed decreased 298.

Total number of pensioners in Canada, March 31, 1929	45,848
Total number of pensioners, outside Canada, March 31, 1929	8,772
Total number of pensioners	54,620
Increase in number of pensioners over previous year	3,985

Of this number 2,126 were registered as unemployed.

RELIEF

Relief was granted during the winter of 1928-29 to 4,647 men.
This relief was given 36,602 times, or an average of 7·88 times per man.
The actual expenditure amounted to $367,231.48.

SHELTERED EMPLOYMENT

The department operates Vetcraft Workshops at Halifax, Montreal, Toronto, Hamilton, Winnipeg and Vancouver, and the Canadian Red Cross Society one at Victoria under an agreement. In these, former members of the forces who have been classified as problem cases are given sheltered employment.

The object of the shops is to carefully study the physical and mental condition of the man and to graduate him through different stages of work to that where his self-confidence and work ability are restored and he is able to accept employment in the outside labour market. Unfortunately, great difficulty is experienced in placing men outside, with the result that there is not the movement through the shops that there should be.

During the year under review special efforts were directed to make the benefits of sheltered employment more active, and 169 new cases were admitted and 133 discharged, and on March 31 296 men were on the strength. A more aggressive sales policy is being brought about, as an increase in sales will result in the employment of more men. The problem of operating these shops with such sub-standard labour is a very difficult one, as many men have little remaining work value.

VOCATIONAL TRAINING

On March 31, 1929, there were 24 men undergoing vocational training, distributed as follows:—

District	On strength 1-4-28	Taken on strength	Struck off strength	On strength 31-3-29
A	1	7	7	1
B	.....	5	3	2
C	6	7	11	2
D	13	27	26	14
F	1	1	2	
G	4	6	7	3
H	1	3	3	1
I	.....	1	1	
J	1	2	2	1
Totals	27	59	62	24

INDUSTRIAL PROBLEM CASES

On March 31, 1929, there were 14 men employed under this authority, distributed as follows:—

District	Employed at	On strength 1-4-28	Taken on strength	Struck off strength	On strength 31-3-29
C	Ottawa, Ont.		16	9	7
D	Hamilton, Ont. and Toronto, Ont.		11	8	3
H	Regina, Sask.		1		1
K	Saint John, N.B.		4	1	3
			32	18	14

RETURNED SOLDIERS' INSURANCE DIVISION

The Returned Soldiers' Insurance Act was amended by Chapter 45 of the Statutes of 1928, to provide that applications for insurance may again be received until August 31, 1929.*

This amendment also provided that where the applicant for insurance had not a reasonable expectation of life the application was to be refused.

Under this amendment a total number of 4,757 applications were received, of which 557 were refused.

STATEMENT FOR PERIOD APRIL 1, 1928, TO MARCH 31, 1929

Policies			
Policies issued June, 1928, to March 31, 1929	4,035	for	$ 9,869,000 00
Surrendered for cash to March 31, 1928	2,329	"	5,356,000 00
" " 1928-29	975	"	2,335,904 00
Total surrendered for cash	3,304	"	$ 7,691,904 00
Reduced paid-up insurance to March 31, 1928	88	"	$ 55,409 50
" " 1928-29	17	"	19,820 00
Total	105	"	$ 75,229 50
Reduced paid-up insurance terminated	7	"	$ 6,404 00
Reduced paid-up insurance in force	98	"	$ 68,825 50
On extended term insurance to March 31, 1928	1,992	"	$ 4,455,500 00
" " 1928-29	796	"	1,833,800 00
Total	2,788	"	$ 6,289,300 00
Extended term insurance terminated (including those shown as surrendered for cash)	940	"	2,250,500 00
Total policies on extended term insurance	1,848	"	$ 4,038,800 00
Disability claims admitted to March 31, 1928	25	"	$ 53,969 69
" " " 1928-29	12	"	29,770 95
Total	37	"	$ 83,740 64
Terminated or reduced	8	"	21,085 13
Disability claims in force	29	"	$ 62,655 51

*Since extended to August 31, 1930.

DEATH CLAIMS

Policy value of death claims to March 31, 1928	1,740	for	$ 4,921,150 00
" " " 1928-29	227	"	530,095 46
Total policy value	1,967	"	$ 5,451,245 46
Settled by cash payment or annuity to March 31, 1928	1,293	"	$ 3,758,283 33
" " " " 1928-29	171	"	1,310,544 98
Total settled	1,464	"	$ 5,068,828 31
Insurance and premiums paid under Sec. 10 R.S.I. to March 31, 1928	404	"	$ 227,402 85
Insurance and premiums paid under Sec. 10 R.S.I. 1928-29	47	"	36,014 30
Total	451	"	$ 263,417 15
Claims pending settlement March 31, 1929	52	"	119,000 00

LAPSES AND REINSTATEMENTS

Lapses to March 31, 1928	24,414	"	$57,631,500 00
" 1928-1929	2,821	"	6,407,800 00
Total	28,235	"	$64,039,300 00
Reinstatements to March 31, 1928	18,422	"	$41,927,500 00
" 1928-29	2,396	"	5,441,000 00
Total	20,818	"	$47,368,500 00
Net lapses	7,417	"	16,670,800 00

INCOME AND EXPENDITURE

	Dr.	Cr.
Balance of fund March 31, 1928	$5,964,246 99	
Income 1928-29	1,462,469 19	
Interest 1928-29	247,228 00	
Expenditures 1928-29		$ 807,033 05
Balance		6,866,911 13
	$7,673,944 18	$ 7,673,944 18
Policies in force March 31, 1929	27,473	$61,008,931 01

ACCOUNTS BRANCH

The various items of income and expenditure set out in statement No. 1, are in agreement with the amounts shown in the Public Accounts and Auditor General's reports.

Complete details of the financial operations will be found in the statements which follow. These statements are shown in the same form as in preceding years; a short description of each is given:—

1. Income and Expenditure, Fiscal Year 1928-29

On the left side is shown the appropriations granted by Parliament; revenue received from all sources, together with the balances of trust funds as at the first of the year.

On the right side is shown the gross disbursements made, divided into direct payments to men and their dependents, both on account of pensions and re-establishment, payments for services rendered such men, and payments made to outside organizations which render service to returned men, unexpended portions of the appropriations voted by Parliament for the fiscal year and the balances of trust funds at the close of the year.

The summary statement covers the main divisions of the department's income and expenditure condensed for reference purposes.

2. Net Disbursements on Pensions Account for the period April 1, 1916, to March 31, 1929, by Fiscal Years.

3. Net Disbursements of the Department of Pensions and National Health on Re-establishment Account for the Period, July, 1915, to March 31, 1929, by Fiscal Years.

4. Current Assets of the Department as at March 31, 1929.

Cash advances made for travelling, petty cash, maintenance accounts, outside institutions, Red Cross Workshops, etc.

Stores—Value of food, equipment, etc., held by department for use in hospitals, offices, etc.

Disposal Stores—Surplus goods available for sale or transfer to other Government departments.

5. Vocational Loans as at March 31, 1929.

Outstanding loans distributed by provinces.

6. Accounts Receivable at March 31, 1929.

Amounts due from Great Britain, British Dominions, United States and Allied Governments for treatment of their ex-nationals, services rendered Canadian Government departments—Department of National Defence, Department of Indian Affairs, etc.—amounts due from outside hospitals and sanatoria.

7. Passenger, Freight and Express Transportation as at March 31, 1929.

Services of the department on which passenger transportation expense was incurred; freight and express on goods purchased, shipped, etc.; distributed according to railways used.

8. Department of Pensions and National Health and Pensions Appropriations by Fiscal Years to March 31, 1930.

SUMMARY OF FINANCIAL STATEMENT, FISCAL YEAR 1928-29

Appropriations—Pensions		$40,960,880 95
" Re-establishment		8,264,362 56
Revenue		1,751,691 82
Casual Revenue		200,534 21
Deposits to Trust Funds, 1928-29	$ 2,115,930 81	
Balance of Trust Funds at March 31, 1928	6,644,406 87	
		8,760,337 68
		$59,937,807 22

Direct payments to Men and Dependents:—		
Pensions	$41,144,395 09	
Re-establishment	3,977,259 91	
		$45,121,655 00
Payments for Services to Men and Dependents		3,906,048 41
Capital Expenditures		74,308 55
Stores Purchased		495,460 42
Payments to Outside Organizations not under control of the department		53,341 58
Recoverable Expenditures		492,156 54
		$50,142,970 50
Cost of Administration		1,538,152 72
		$51,681,123 22
Casual Revenue		200,534 21
		$51,881,657 43
Federal Appeal Board		174,615 21
		$52,056,272 64
Balance of Trust Funds at March 31, 1929		7,570,897 60
Unexpended Appropriations—Pensions	$ 10,106 59	
" " Re establishment	300,530 39	310,636 98
		$59,937,807 22

No. 1.—STATEMENT OF INCOME AND EXPENDITURES AS PER STATEMENTS RENDERED TO THE AUDITOR GENERAL, FISCAL YEAR ENDED MARCH 31, 1929

APPROPRIATIONS AND REVENUE

Appropriations

Pensions—			
Vote 79 N.W. Rebellion 1885 and General		$ 35,000 00	
80 Civil Flying		5,000 00	
81 European War Pensions	$39,000,000 00		
Overdraft European War Pensions	1,047,757 21		
		40,047,757 21	
Statute—Militia Pensions Act, 1901		873,123 74	
			$40,960,880 95
Re-Establishment—			
Statute Salary—Minister of Department		$ 10,000 00	
Vote 28 Civil Government		14,920 00	
282 Care of Patients	$ 2,200,000 00		
524 Care of Patients	250,000 00		
		2,450,000 00	
283 Salaries		2,725,000 00	
284 Compensation	1,220,000 00		
523 Compensation	700,000 00		
		1,920,000 00	
285 Vocational Loans		2,000 00	
286 Interest on Funds		21,000 00	
287 Unemployment Relief	$ 250,000 00		
Overdraft Unemployment Relief	128,987 86		
		378,987 86	
288 Operating	$ 250,000 00		
522 Operating	40,000 00		
		290,000 00	
289 Employers' Liability Compensation		100,000 00	
290 Sheltered Employment		175,000 00	
291 Federal Appeal Board	$ 130,000 00		
Statute Salaries—Members, Federal Appeal Board	34,741 94		
		164,741 94	
521 Grant to Canadian Legion, B.E.S.L.		10,000 00	
Statute Miscellaneous Gratuities		2,712 76	
			8,264,362 56

DISBURSEMENTS

Direct Payments to Men and Dependents

Pensions—			
European War Pensions—			
Pensions	$36,064,937 66		
Retroactive Adjustments	2,349,913 81		
First Payments—B.P.C. Awards	1,037,929 96		
Federal Appeal Board Awards	332,697 06		
Gratuities	121,040 34		
Final Payments by Agreement	18,957 20		
New Zealand Pensions	12,566 25		
Supplementary—Imperial	227,660 84		
Supplementary—French, Italian, etc.	28,240 95		
Burial Grants	28,368 32		
Permanent Force Disabilities	19,065 55		
		$40,241,377 94	
Militia Pensions Act, 1901		873,123 74	
North West Rebellion 1885 and General		29,653 41	
Civil Flying		240 00	
			$41,144,395 09
Compensation—Treatment and Training		$ 2,240,688 19	
Vocational Loans		985 96	
Interest on Trust Funds		10,557 59	
Unemployment Relief		370,198 14	
Sheltered Employment—Wages to Operatives in Department Workshops		159,695 46	
War Service Gratuity		3,437 41	
Funds under Administration		378,969 62	
Industrial Problem Cases		3,038 31	
Transportation of Blinded Former Soldiers		2,656 18	
Returned Soldiers' Insurance—			
Death Benefits	$ 182,423 58		
Annuities	351,499 63		
Disability Benefits	5,994 98		
Cash Surrender Values	234,680 93		
Return of Premiums	13,592 74		
Renewal Premiums Refunded	18,841 19		
		807,033 05	
			3,977 259 91

STATEMENT OF INCOME AND EXPENDITURES AS PER STATEMENTS RENDERED TO THE AUDITOR GENERAL, FISCAL YEAR ENDED MARCH 31, 1929—*Continued*

APPROPRIATIONS AND REVENUE—*Con.*

REVENUE

Vote 282	Care of Patients	$ 238,983 06	
283	Salaries	83,136 55	
284	Compensation	426,361 87	
285	Vocational Loans	250 00	
287	Unemployment Relief	3,086 66	
288	Operating	447,688 21	
290	Sheltered Employment	343,022 03	
291	Federal Appeal Board	15,352 71	
Statute	Miscellaneous Gratuities	190 00	
Vote 81	European War Pensions	193,620 73	
			$ 1,751,691 82

CASUAL REVENUE

Re-establishment	$ 143,625 87	
Pensions	56,908 34	
		200,534 21

FUNDS

War Service Gratuity—		
Balance at March 31, 1928	$ 174,464 09	
Revenue	3,551 21	
Returned Soldiers' Insurance—		
Balance at March 31, 1928	5,964,246 99	
Revenue—Premiums	$ 1,462,469 19	
Interest on the Fund	247,228 00	
	1,709,697 19	
Funds under Administration—		
Balance at March 31, 1928	505,695 79	
Revenue—Pensions, etc.	402,682 41	
		8,760,337 68

DISBURSEMENTS—*Con.*

RE-ESTABLISHMENT

PAYMENTS FOR SERVICES TO MEN AND DEPENDENTS

Hospital Treatment—			
Departmental Hospitals			$ 1,957,252 94
Outside Hospitals and Sanatoria			1,352,950 94
Dental Treatment			47,861 58
Limb Factory Operations—			
Factory Operations	$ 195,543 43		
Outside Purchases and Repairs	39,690 82		
Appliances Issued and Repairs	8 77		
		235,243 02	
Transportation—			
Patients and Escorts	$ 52,819 68		
Pensioners	5,067 47		
Travelling Medical Boards	51,177 71		
		109,064 86	
Funeral Expenses		27,488 76	
Sheltered Employment—			
Halifax Vetcraft Shop	$ 11,626 84		
Saint John Vetcraft Shop	762 15		
Montreal Vetcraft Shop	38,358 03		
Kingston Vetcraft Shop	920 00		
Toronto Vetcraft Shop	51,409 41		
Hamilton Vetcraft Shop	11,259 05		
Winnipeg Vetcraft Shop	11,671 48		
Regina Vetcraft Shop	1,698 12		
Calgary Vetcraft Shop	677 86		
Vancouver Vetcraft Shop	14,727 23		
		143,110 17	
Vocational Training Expense		1,527 72	
Rehabilitation Committee—Montreal		11,876 38	
Employers' Liability Compensation—			
Quebec	163 79		
Nova Scotia	141 49		
Ontario	12,519 47		
Manitoba	3,260 31		
Saskatchewan	95 00		
Alberta	3,174 39		
British Columbia	317 59		
		19,672 04	
			$ 3,906,048 41

Re-Establishment			
Capital Expenditures			$ 74,308 55
Stores Purchased—			
General Treatment and O. & S.A. Stores		$ 313,186 23	
Vetcraft Stores		182,274 19	
			495,460 42
Payments to Outside Organizations not Under Control of Department			
Last Post Fund		20,000 00	
Canadian National Institute for the Blind		5,622 97	
Grant to Canadian Legion, B.E.S.L.		10,000 00	
Red Cross Society for Sheltered Employment—			
Vancouver	$ 8,079 19		
Victoria	9,639 42		
		17,718 61	
			53,341 58
Recoverable Expenditures			
Cash Advances		330,927 01	
Accounts Receivable		161,229 53	
			492,156 54
Cost of Administration			
Administration Salaries		1,370,210 41	
General—			
Telegrams, Telephones, Postage, etc.	$ 28,541 22		
Transportation and Travelling	41,168 77		
Transportation and Travelling—Investigators	15,090 43		
Stationery and Office Supplies	43,326 60		
Rent, Taxes, Insurance and Bonding	601 60		
Light, Heat, Power and Water Rates	1,635 12		
Janitors' Supplies	4,047 19		
Maintenance and Repair to Buildings, Equipment and Furniture	10,419 56		
Automobile Expense	5,073 87		
Freight and Express	3,186 50		
Special Publicity	2,041 85		
Miscellaneous Expense	12,809 60		
		167,942 31	
			1,538,152 72
Carried forward			$51,681,123 22

STATEMENT OF INCOME AND EXPENDITURES AS PER STATEMENTS RENDERED TO AUDITOR GENERAL, FISCAL YEAR ENDED MARCH 31, 1929—*Concluded*

APPROPRIATIONS AND REVENUE—*Con.*

Brought forward	$59,937,807 22

DISBURSEMENTS—*Con.*

Casual Revenue			
Re-establishment		$ 143,625 87	
Pensions		56,908 34	
			200,534 21
			$51,881,657 43
Federal Appeal Board			
Salaries—Members of Board		34,741 94	
Salaries—Staff		61,503 58	
Salaries—Soldiers' Advisers		33,041 04	
General Expenses of Board		31,487 70	
General Expenses of Soldiers' Advisers		13,840 95	
			174,615 21
			$52,056,272 64
Funds			
War Service Gratuity—			
Balance at March 31, 1928	$ 174,464 09		
Revenue	3,551 21		
	$ 178,015 30		
Disbursements	3,437 41		
Balance at March 31, 1929		174,577 89	
Returned Soldiers' Insurance—			
Balance at March 31, 1928	$ 5,964,246 99		
Revenue	1,709,697 19		
	$ 7,673,944 18		
Payments to Beneficiaries	807,033 05		
Balance at March 31, 1929		6,866,911 13	
Funds under Administration—Pensions, Army Pay, etc.—			
Balance to March 31, 1928	$ 505,695 79		
Revenue	402,682 41		
	$ 908,378 20		
Payments to Beneficiaries	378,969 62		
Balance at March 31, 1929		529,408 58	
			7,570,897 60

		UNEXPENDED APPROPRIATIONS		
Pensions—				
Vote 79 N.W. Rebellion 1885 and General	$	5,346 59		
80 Civil Flying		4,760 00		
			10,106 59	
Re-Establishment—				
Vote 28 Civil Government	$	500 00		
282 Care of Patients		8,731 51		
283 Salaries		52,214 73		
284 Pay and Allowances		105,673 68		
285 Vocational Loans		1,264 04		
286 Interest on Funds		10,442 41		
288 Operating		18,947 54		
289 Employers' Liability Compensation		80,327 96		
290 Sheltered Employment		16,209 08		
291 Federal Appeal Board		6,219 44		
			300,530 39	
				310,636 98
Grand Total Appropriations, Revenue and Funds		$59,937,807 22	Grand Total Disbursements and Unexpended Balances	$59,937,807 22

No. 2.—NET DISBURSEMENTS ON ACCOUNT OF PENSIONS—APRIL 1, 1916, TO MARCH 31, 1929

Details	Total	April, 1916 to March, 1923	Fiscal Year 1923-24	Fiscal Year 1924-25	Fiscal Year 1925-26	Fiscal Year 1926-27	Fiscal Year 1927-28	Fiscal Year 1928-29
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
European War Pensions	368,897,599 78	151,751,590 78	32,344,941 32	33,706,885 88	35,970,776 35	36,614,989 52	38,460,658 72	40,047,757 21
North West Rebellion	381,703 42	177,106 69	39,612 11	35,348 69	34,028 84	35,264 16	30,689 52	29,653 41
Fenian Raid	8,193 54	6,431 38	633 00	466 25	662 91	.....	.....	.....
Militia Long Service	6,410,989 90	2,000,533 02	640,336 83	696,274 60	697,919 84	743,626 44	759,175 43	873,123 74
Civil Flying	3,109 22	.....	2,005 17	144 05	240 00	240 00	240 00	240 00
Pensions Administration	5,937,479 80	5,937,479 80	.....	.....	.....	.....	.....	.....
Total Cost of Pensions	381,639,075 66	159,873,141 67	33,027,528 43	34,439,119 47	36,703,627 94	37,394,120 12	39,250,763 67	40,950,774 36
Less Casual Revenue	753,868 31	313,440 38	81,853 86	78,273 76	148,918 79	47,794 77	26,678 41	56,908 34
Net Cost of Pensions	380,885,207 35	159,559,701 29	32,945,674 57	34,360,845 71	36,554,709 15	37,346,325 35	39,224,085 26	40,893,866 02

NOTE.—From April 1, 1921, the Administration Expenses of the Board of Pension Commissioners are included with Re-establishment expenditures.

No. 3.—NET DISBURSEMENTS ON ACCOUNT OF RE-ESTABLISHMENT FROM JULY 1915 TO MARCH 31, 1929

Details	Total	July, 1915 to March, 1923	Fiscal Year 1923-24	Fiscal Year 1924-25	Fiscal Year 1925-26	Fiscal Year 1926-27	Fiscal Year 1927-28	Fiscal Year 1928-29
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Minister's Salary	71,741 91	15,277 76	10,000 00	10,000 00	10,000 00	6,464 15	10,000 00	10,000 00
Civil Government	259,231 29	135,767 80	26,218 00	23,280 00	18,780 00	20,770 00	19,995 49	14,420 00
Capital	3,593,819 31	3,563,342 54	5,616 52	9,876 16	8,571 79	6,412 30	.....	.....
Care of Patients	31,342,935 29	17,560,199 22	2,453,842 35	2,370,309 12	2,349,808 76	2,075,167 87	2,092,339 48	2,441,268 49
Vocational Expense	3,785,389 55	3,768,226 38	7,160 61	4,644 98	4,004 53	1,353 05	.....	.....
Salaries	45,612,080 86	27,292,724 38	4,059,857 88	3,260,307 12	2,924,285 29	2,713,736 42	2,688,384 50	2,672,785 27
Compensation	54,091,932 99	44,277,696 41	2,188,802 04	1,989,066 34	1,421,347 46	1,223,720 66	1,176,973 76	1,814,326 32
Vocational Loans	560,307 91	514,783 62	32,709 72	5,489 50	4,752 41	1,161 64	675 06	735 96
Interest on Funds	171,707 89	55,441 42	21,317 31	20,381 10	19,554 97	23,745 35	20,710 15	10,557 59
Operating	6,177,554 70	4,440,105 30	513,931 61	295,654 80	230,480 85	209,155 45	217,174 23	271,052 46
Unemployment Relief	6,027,805 42	3,725,731 38	312,008 98	433,971 13	372,545 02	374,081 14	430,479 91	378,987 86
Employers' Liability Compensation	295,425 20	15,716 38	18,082 22	30,087 70	74,997 18	65,174 80	71,694 88	19,672 04
Sheltered Employment	1,141,049 71	56,409 30	251,257 86	210,886 66	172,447 49	158,421 69	132,835 79	158,790 92
Special Publicity	14,449 87	6,200 00	652 95	2,454 85	3,484 97	1,657 10	.....	.....
Federal Appeal Board	709,067 74	.....	82,715 03	132,750 96	119,303 54	122,974 44	127,543 21	123,780 56
Salaries—Members Federal Appeal Board	158,741 94	.....	.....	31,000 00	31,000 00	31,000 00	31,000 00	34,741 94
Miscellaneous Gratuities	12,253 00	510 00	1,663 32	2,835 66	476 60	1,842 26	2,212 40	2,712 76
Superannuation Fund No. 4	3,840 00	.....	1,120 00	2,720 00	.....	.....	.....	.....
Grant to Can. Legion, B.E.S.L.	10,000 00	.....	.....	.....	.....	.....	.....	10,000 00
Provisional Bonus	3,712,939 00	3,233,502 09	302,953 42	176,483 49	.....	.....	.....	.....
Medical Appeal Board	7,228 94	3,133 67	4,095 27	.....	.....	.....	.....	.....
Repatriation	39,566 41	22,629 25	16,937 16	.....	.....	.....	.....	.....
Civil Pay—G.T.R. Employees	37,961 54	37,961 54	.....	.....	.....	.....	.....	.....
Demobilization	37,343 22	37,343 22	.....	.....	.....	.....	.....	.....
Increases in Salary—Reclassification	5,480 24	5,480 24	.....	.....	.....	.....	.....	.....
War Bonus	136,795 29	136,795 29	.....	.....	.....	.....	.....	.....
Bonus—Soldiers' Aid Commission	48,302 45	48,302 45	.....	.....	.....	.....	.....	.....
War Appropriation	24,667,838 29	24,667,838 29	.....	.....	.....	.....	.....	.....
Pensions—Salaries and Contingencies	541,829 30	541,829 30	.....	.....	.....	.....	.....	.....
Total Cost of Re-Establishment	183,274,619 26	134,162,947 23	10,310,942 25	9,012,199 57	7,765,840 86	7,036,838 32	7,022,018 86	7,963,832 17
Less Casual Revenue	4,425,416 43	2,017,512 96	721,141 38	473,049 19	446,587 40	442,937 25	180,611 26	143,576 99
Net Cost of Re-Establishment	178,849,202 83	132,145,434 27	9,589,800 87	8,539,150 38	7,319,253 46	6,593,901 07	6,841,407 60	7,820,255 18

No. 4.—STATEMENT SHOWING DISTRIBUTION OF CURRENT ASSETS BY PROVINCES AS AT MARCH 31, 1929

District	Province	Total	Cash Advances	Treatment Stores	Vetcraft Stores	Disposal Stores
		$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
H.O.	Ottawa	14,277 19	1,142 30	12,743 54	172 40	218 95
"A"	Quebec	70,882 04	.....	50,158 55	19,812 98	910 51
"B"	Nova Scotia and Prince Edward Island	34,535 31	.....	8,904 32	24,749 60	881 39
"C"	Eastern Ontario	1,519 39	115 00	1,404 39	.....	.....
"D"	Central Ontario	172,549 77	.....	75,871 91	92,698 76	3,979 10
"F"	Western Ontario	19,648 09	.....	19,259 00	.....	389 09
"G"	Manitoba	30,110 43	600 00	7,086 29	21,923 08	501 06
"H"	Saskatchewan	6,575 94	655 00	5,757 73	.....	163 21
"I"	Alberta	11,968 45	.....	11,476 21	.....	492 24
"J"	British Columbia	19,477 11	406 00	13,241 19	5,801 82	28 10
"K"	New Brunswick	6,666 80	7 00	4,236 88	.....	2,422 92
"M"	London, England	26 21	.....	26 21	.....	.....
	Totals	388,236 73	2,925 30	210,166 22	165,158 64	9,986 57

No. 5.—STATEMENT SHOWING DISTRIBUTION OF VOCATIONAL LOANS BY PROVINCES AS AT MARCH 31, 1929

Quebec	$ 1,041 80
Nova Scotia and Prince Edward Island	2,163 55
Eastern Ontario	2,511 73
Central Ontario	7,604 15
Western Ontario	1,287 92
Manitoba	1,638 90
Saskatchewan	1,776 09
Alberta	3,820 47
British Columbia	3,990 61
New Brunswick	2,079 93
Total	$27,915 15

No. 6.—ACCOUNTS RECEIVABLE AS AT MARCH 31, 1929

Great Britain	$ 10,067 54
Imperial Ministry of Labour	88,035 40
British Dominions, U.S.A. and other Allied Governments	24,401 96
Canadian Government Departments	16,588 98
Vetcraft Workshops	20,910 79
Other Miscellaneous Accounts	14,128 88
Total	$ 174,133 55

No. 7.—TRANSPORTATION EXPENDITURE, FISCAL YEAR 1928-29

Service	Total expenditure
Administrative Personnel	$ 10,356 80
Investigations, Adminsitrative and Pensions	4,373 31
Transportation, B.P.C. Staff	456 32
Men called in for treatment or orthopaedic repairs	27,478 15
Men called in for clinical treatment	4,923 03
Transportation of deceased patients and escorts thereto	338 10
Travelling Medical Boards	1,462 13
Pensioners examination	37,992 67
Transportation recovered from compensation	180 00
Last Post Fund	102 27
Vetcraft Staff travelling	783 38
Blind ex-Members of the Forces (Part recoverable, see Revenue Vote No. 290)	1,442 54
Men taking vocational training	70 09
Transportation issued in lieu of relief	211 82
O. and S.A. Staff travelling	208 85
Members, Federal Appeal Board	5,597 81
Federal Appeal Board, Soldiers' Advisers travelling	644 77
Federal Appeal Board, ex-Imperial Appellants	160 57
	$ 96,782 61
Freight and express	16,728 61
Total Net Expenditure	$ 113,511 22
Accounts Receivable	6,381 27
Total Gross Expenditure	$ 119,892 49

DISTRIBUTION BY RAILWAYS

		%	
Passenger—			
Canadian National Railways	$65,994 72	64·0	
Canadian Pacific Railway	28,718 33	27·8	
Sundry Railways	8,450 83	8·2	
Total		100·0	$ 103,163 88
Freight and Express—			
Canadian National Railways	$ 6,711 99	40·1	
Canadian Pacific Railway	2,583 22	15·4	
Canadian National Express	5,187 57	31·0	
Canadian Pacific Express	1,219 49	7·3	
Sundry Railways	1,026 34	6·2	
Total		100·0	$ 16,728 61
Total amount paid to Railways			$ 119,892 49

No. 8.—DEPARTMENT OF PENSIONS AND NATIONAL HEALTH APPROPRIATIONS BY FISCAL YEARS FROM 1922-23 TO 1929-30

—	1922-23	1923-24	1924-25	1925-26	1926-27	1927-28	1928-29	1929-30
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
RE-ESTABLISHMENT—								
Civil Government	40,820 00	39,200 00	28,820 00	21,500 00	21,560 00	21,560 00	14,920 00	9,300 00
Capital	75,000 00	30,000 00	10,000 00	10,000 00	10,000 00	.....	.....	.....
Care of Patients	4,000,000 00	3,500,000 00	2,600,000 00	2,350,000 00	2,350,000 00	2,200,000 00	2,450,000 00	2,600,000 00
Vocational Expense	85,000 00	50,000 00	20,000 00	5,000 00	5,000 00	.....	.....	.....
Salaries	5,425,000 00	4,425,000 00	3,553,000 00	3,100,000 00	2,850,000 00	2,725,000 00	2,725,000 00	2,950,000 00
Compensation (Pay and Allowances)	3,900,000 00	3,200,000 00	2,100,000 00	1,810,000 00	1,490,000 00	1,350,000 00	1,920,000 00	1,900,000 00
Operating	700,000 00	600,000 00	450,000 00	400,000 00	300,000 00	250,000 00	290,000 00	300,000 00
Unemployment Relief	1,050,000 00	500,000 00	200,000 00	350,000 00	375,000 00	450,000 00	250,000 00	250,000 00
Vocational Loans	75,000 00	35,000 00	20,000 00	10,000 00	3,000 00	3,000 00	2,000 00	2,000 00
Interest on Funds	18,500 00	22,000 00	22,000 00	20,000 00	25,000 00	22,500 00	21,000 00	5,000 00
Employers' Liability Compensation	175,000 00	75,000 00	30,000 00	75,000 00	75,000 00	75,000 00	100,000 00	75,000 00
Sheltered Employment	470,000 00	375,000 00	390,000 00	250,000 00	225,000 00	175,000 00	175,000 00	175,000 00
Medical Appeal Board	.....	50,000 00	.....	.....	.....	.....	.....	.....
Federal Appeal Board	.....	357,996 00	150,000 00	150,000 00	130,000 00	130,000 00	130,000 00	130,000 00
Repatriation	.....	25,000 00	.....	.....	.....	.....	.....	.....
Special Publicity	.....	20,000 00	5,000 00	5,000 00	3,000 00	.....	.....	.....
Grant to Canadian Legion B.E.S.L.	.....	.....	.....	.....	.....	.....	10,000 00	10,000 00
Grant to Last Post Fund	.....	.....	.....	.....	.....	.....	.....	20,000 00
Total	16,014,320 00	13,304,196 00	9,578,820 00	8,556,500 00	7,862,560 00	7,402,060 00	8,087,920 00	8,426,300 00
PENSIONS—								
European War	33,256,800 00	33,050,000 00	32,990,000 00	35,000,000 00	36,500,000 00	38,600,000 00	39,000,000 00	42,000,000 00
Fenian Raid	1,000 00	1,000 00	750 00	750 00	.....	.....	.....	.....
North West Rebellion	42,700 00	40,000 00	45,000 00	40,000 00	36,000 00	40,000 00	35,000 00	35,000 00
Militia Pensions Act, 1901	500,000 00	600,000 00	650,000 00	700,000 00	700,000 00	800,000 00	850,000 00	850,000 00
Civil Flying	.....	10,000 00	5,000 00	5,000 00	5,000 00	5,000 00	5,000 00	5,000 00
Total	33,800,500 00	33,701,000 00	33,690,750 00	35,745,750 00	37,241,000 00	39,445,000 00	39,890,000 00	42,890,000 00
Grand Total	49,814,820 00	47,005,196 00	43,269,570 00	44,302,250 00	45,103,560 00	46,847,060 00	47,977,920 00	51,316,300 00

WORKMEN'S COMPENSATION

Number of claims and amounts paid to Workmen's Boards and to Employers in respect of pensioners of twenty-five per cent and upwards:—

Province	Number	Amount
Quebec	3	$ 163 79
Nova Scotia	1	141 49
Ontario	73	12,519 47
Manitoba	37	3,260 31
Saskatchewan	1	95 00
Aberta	20	3,174 39
British Columbia	2	317 59
Total	137	$ 19,672 04

STATEMENT SHOWING TOTAL STAFF OF THE DEPARTMENT AS AT MARCH 31, 1928 AND MARCH 31, 1929

—	March 31, 1928	March 31, 1929
Head Office, Ottawa	422	423
"B" District—Nova Scotia, Prince Edward Island	147	89
"K" District—New Brunswick	X	a 43
"A" District—Quebec	247	246
"C" District—Eastern Ontario	50	45
"D" District—Central Ontario	459	421
"F" District—Western Ontario	259	248
"G" District—Manitoba	96	82
"H" District—Saskatchewan	43	33
"I" District—Alberta	76	75
"J" District—British Columbia	160	157
"M" District—Overseas Office, London, England	10	10
Total	1,969	1,872

"a"—New Brunswick figures included in Nova Scotia and Prince Edward Island for year 1928.

NOTE.—Figures shown in March 1929 are exclusive of Staff numbering 100 transferred to control of the Board of Pension Commissioners during the year.

WAR SERVICE CLASSIFICATION OF STAFF AS AT MARCH 31, 1928, AND MARCH 31, 1929

—	1928	1929	Percentage
Service in France	1,219	1,146 [1]	61·2
Service in England	167	161 [2]	8·7
Service in Canada	80	80 [3]	4·3
Rejected or exempted	13	13	0·6
Over and under age	23	32	1·7
Civilians (Male)	10	11	0·6
Civilians (Female)	457	429 [4]	22·9
Total	1,969	1,872	100·0

[1]Includes 110 Nursing Sisters. [2]Includes 31 Nursing Sisters. [3]Includes 5 Nursing Sisters. [4]Includes 21 Nursing Sisters.

STATEMENT SHOWING DISTRIBUTION OF MALE STAFF BY WAR SERVICE CLASSIFICATION AS AT MARCH 31, 1929

—	Number	Percentage
Service in France	1,036	79·9
Service in England	130	10·0
Service in Canada	75	5·7
Rejected or exempted from Military Service	13	1·0
Boys and men under and over, Military Age	32	2·5
Civilian (Male)	11	0·9
Total	1,297	100·0

Male Staff with War Service	1,241
Male Staff with No War Service	56

DISABLEMENT FUND STATEMENT

E. H. SCAMMELL, Trustee

The following statement of loans, advances and repayments made during the period April 1, 1928, to March 31, 1929, indicates the activity of the Fund.

Cash on hand, 31-3-28	$ 5,730 32	
Sundry loans outstanding	49,349 56	
Total advances made, 5,880	160,748 12	
Refunds received		$ 153,463 87
Donations made		4,470 06
Bad debts written off		2,417 89
Administration expense		222 12
Sundry loans outstanding		42,566 45
Cash on hand, 31-3-29		12,687 61
	$ 215,828 00	$ 215,828 00

DISABLEMENT FUND STATEMENT AS AT MARCH 31, 1929

Subscriptions			$ 93,710 20
Interest on same			65,582 48
Securities held at cost—			
Face value $72,500		$ 64,453 54	
Loans outstanding—			
Head Office	$ 32,133 61		
Districts	10,432 84		
		42,566 45	
Donations—			
Current period	4,470 06		
Previously made	21,128 84		
		25,598 90	
Bad debts written off—			
Current period	2,417 89		
Previous years	10,371 01		
		12,788 90	
Administration expenses—			
Current period	222 12		
Previously expended	975 16		
		1,197 28	
Cash on hand—			
Districts	7,919 95		
Head Office	4,767 66		
		12,687 61	
		$ 159,292 68	$ 159,292 68

APPENDIX I

ADMINISTRATION OF CANTEEN FUND

Ontario

Trustees:

Major-Gen. V. A. S. Williams, C.M.G., Chairman.
Lieut.-Col. Bertram Hooper, D.S.O., M.C.
Capt. W. S. Haney, M.P.P.
Capt. Jules John Ferry.
Private Percy T. Bould.
Major Alexander C. Lewis, Secretary.

No report received.

Quebec

Trustees:

Brig.-Gen. G. E. McCuaig, C.M.G., D.S.O.
Brig.-Gen. E. deB. Panet, C.M.G., D.S.O.
Lt.-Col. C. B. Price, D.S.O., D.C.M.
Lt.-Col. John F. Buckley, Secretary.

No changes have taken place in the mode of administration of this fund during the period under review.

Excepting those who are in receipt of a pension or assistance from the Government, relief has been granted, after investigation, to ex-members of the C.E.F. who saw service in England or France in the late war, or members of the Royal Canadian Navy who served overseas, and to the dependents of the above.

This help has been extended in cases of sickness, accidents or circumstances beyond the recipient's control, but not in cases of straight unemployment.

The following is a statement of receipts and expenditures:—

Amount received		$ 267,606 55	Investments		$ 294,325 50
" "		14,491 51	Grants		7,191 50
Interest	$29,809 99		Administration		1,273 48
Less premium on bonds	9,320 99				
		20,489 00			
Overdraft		203 42			
		$ 302,790 48			$ 302,790 48

Nova Scotia

Trustees:

Capt. the Rev. Clarence MacKinnon, D.D., Chairman.
Major Edgar J. Vickery, Secretary.
Mr. John Vincent MacNeil.

No report received.

New Brunswick

Trustees:

Major Jude P. Bourgeois, Chairman.
Major J. Gilbert Hart.
Lieut.-Col. M. C. Buchanan, M.C.

The New Brunswick Board of Trustees has continued the administration of the fund under the policy previously adopted, by expending the revenue and a portion of the capital in alleviating distress among ex-service men and their dependents.

The board is of the opinion that the disbursement of the Canteen Fund should be distributed over a period of thirty years, when the greatest number of the beneficiaries will be in need. It is felt that those who contributed to the fund should derive the benefit therefrom.

Relief has been granted to widows and orphans of ex-service men and in special cases of distress when caused by illness, emergency, or death. Unemployment alone has not been considered sufficient cause for assistance. No relief has been granted to applicants in receipt of pensions.

All applications have been thoroughly investigated with the co-operation of the Canadian Legion, the Red Cross, the Associated Charities and many individuals throughout the province, before any action was taken.

The following is a statement of receipts and expenditures:—

Investments as at 1-4-28	$ 82,658 37	Investments	$ 87,208 37
Amount received	5,077 39	Relief and grants less repayments	4,960 45
Balance on hand as 1-4-28	2,011 66	Loans	150 00
Interest	3,644 55	Administration	1,069 79
		Balance on hand	3 36
	$ 93,391 97		$ 93,391 97

British Columbia

Trustees:

Hon. Mr. Justice D. A. McDonald, Chairman.
Lieut.-Col. W. W. Foster, D.S.O.
Lieut.-Col. F. A. Robertson, D.S.O.

The policy followed by the trustees to date has been in accordance with the majority of views of ex-service men as expressed at a conference held on June 7, 1927, the salient points of which are as follows:—

Practically all expenditures are for relief when assistance is required on account of illness, death or emergency. No grants are made for straight unemployment relief. In cases of death, assistance has been given in a number of cases, in payment or part payment of funeral expenses, especially in the cases of the death of dependents of needy ex-service men.

Up to the present time, assistance has been given to 1,256 ex-service men or their dependents. The majority of applications are submitted through some veteran organization, and the trustees wish to extend their appreciation for the help rendered by these organizations in bringing to their attention cases in need of assistance, and in forwarding reports concerning same.

The provincial Government has discontinued the office of the Returned Soldiers' Aid Commission as from March 31, 1929, but in order that the administration of the Canteen Fund might continue as nearly as possible as before, a grant of $5,000 has been authorized by the Government towards the cost of administration of the Canteen Fund for the next year. As a part of this change the office of the secretary has been moved from the Parliament Buildings, Victoria, to Vancouver.

The following is a statement of receipts and expenditures:—

Investments as at 1-4-28	$ 233,185 95	Investments	$ 213,225 95
Cash in bank	4,789 01	Relief and grants	37,172 54
Interest	10,609 24	Administration	70 00
Loans repaid	299 68		
Overdraft	1,584 61		
	$ 250,468 49		$ 250,468 49

Manitoba

Trustees:

Brig.Gen. R. W. Paterson, C.M.G., D.S.O.
Brig.-Gen. H. M. Dyer, C.B., C.M.G., D.S.O.
Lt.-Col. Rev. G. A. Wells, C.M.G., M.A.

The following policy has been adopted by the trustees of the Manitoba Canteen Fund, governing the objects for which the fund will be utilized:—

1. For assistance (in special cases) in the education of children of ex-service men.

2. For assistance of urgent cases among ex-service men, their widows, orphans and dependents, resulting from sickness, operations, etc. (The trustees will not undertake to adjust any medical or hospital account entered into without their consent.) No maintenance relief is granted for conditions resulting from illness or unemployment, as this need is deemed to be the responsibility of the local municipal authorities. The federal Act governing the administration of the fund provides that it shall be used only for the assistance of ex-service men who served with the Canadian Expeditionary Force, as the fund was derived from the profits of the canteens operated on their behalf.

Assistance in individual cases should be considered by the beneficiary as an accommodation loan to be returned to the fund at such time as he may be able to do so.

The following is a statement of receipts and expenditures:—

Investments as at 31-3-28	$ 235,566 04	Investments 31-3-28	$ 224,445 76
Balance on hand	353 40	Loans outstanding	161 93
Loans outstanding	470 28	Relief	23,713 35
Interest received	9,511 31	Education	4,758 95
Profit on sale of securities	442 23	Administration	5,468 82
Received from and owing to Canadian Cavalry Brigade Canteen Fund	399 28	Furniture, nominal value	1 00
Canada Fund	13,284 51	Balance on hand	1,477 24
	$ 260,027 05		$ 260,027 05

Prince Edward Island

Trustees:

Major E. H. Strong, M.C., Chairman.
Major Don. F. Tierney.
Capt. Wm. A. McLaren.

The Prince Edward Island Board of Trustees report that assistance in specially meritorious cases was given to ex-members of the forces, or their dependents, during the past year, for relief in cases of distress. No amount has been spent for scholarships, as all available receipts were required for the above assistance.

The amount shown in the statement, which forms the fund assets, namely $16,500, is on deposit with the provincial Government, and arrangements have been made with the Provincial Treasurer to withdraw what may be required from time to time and a new deposit receipt is issued to the board after every withdrawal.

The following is a statement of receipts and expenditures:—

Fund as at April 1, 1928	$ 16,500 00	Investments	$ 16,500 00
Amount received	921 46	Relief	1,415 00
Interest	506 20	Administration	39 00
Bank balance	563 56	Cash on hand	537 22
	$ 18,491 22		$ 18,491 22

ALBERTA

Trustees:

Lieut.-Col. W. G. MacFarlane, V.D., Chairman.
Dr. G. H. Wade.
Mr. G. W. Waistell.

Under the authority of a formal resolution of the board the two members residing in Edmonton constitute a quorum and deal with applications from ex-service men and regularly meet twice weekly for that purpose.

During the past year, the board has continued its former policy of confining relief to those cases where sickness or distress exists in the home of the applicant. Very few applications for assistance in providing educational facilities to the children of ex-soldiers have been received and these, in common with other applications, are all most carefully reviewed to the board.

The board again respectfully submits that arrangements be made for a conference of the various provincial Boards of Trustees so that the problems arising throughout the Dominion might be discussed and, if possible, a uniform decision as to the use of these funds might be reached.

During the past year Mr. G. W. Waistell was requested by the provincial Government to survey the situation within the province as to the need, or otherwise, of special assistance to the children of ex-service men in order that they might obtain adequate education. The services of Mr. Waistell were very freely given, and his expenses, which had been advanced by the board, were refunded to the board by the provincial Government.

The following is a statement of receipts and expenditures:—

Investments as at April 1, 1928	$ 171,701 82	Investments at cost	$ 176,914 46
Balance on hand as at April 1, 1928	1,491 88	Relief disbursements, less repayments, main fund	10,409 35
Received under Canteen Fund Act, 1928	9,665 99	Relief disbursements, Fund No. 2	257 00
Interest on main fund	7,728 61	Administration	1,532 55
Interest on Fund No. 2	270 00	Balance on hand	2,627 77
Profit on sale of investments	882 83		
	$ 191,741 13		$ 191,741 13

SASKATCHEWAN

Trustees:

Capt. A. H. White, Chairman.
Dr. Charles G. Cox.
Lt.-Col. James McAra.

During the year ending March 31, 1929, the trustees of the Saskatchewan Canteen Fund followed a somewhat similar procedure to that adopted in previous years. Each application for financial assistance, either in the nature of loan or grant, was thoroughly investigated, in most cases through the assistance of officers of the Canadian Legion, B.E.S.L.

During the above period ten meetings were held and the board received 204 applications, of which 115 were approved, involving an outlay of $10,805.09, of which $1,696.70 was repaid.

The past year has been the first one in which inroads have been made upon the capital investment, this being due to the great increase in the number of applications.

The trustees wish to extend their appreciation to the Canadian Red Cross Society, Saskatchewan Division, for the kind use of free office space and also for the assistance given to the trustees at various times by this society.

The following is a statement of receipts and expenditures:—

Investments as at April 1, 1928	$ 162,749 32	Investments	$ 161,016 38
Balance on hand April 1, 1928	537 80	Investments Canada Fund (including accrued interest, $73.10)	7,681 43
Loans outstanding April 1, 1928	1,453 06	Relief, less repayments	8,918 44
Interest	8,049 88	" Canada Fund	60 00
Profit on sale of securities	267 06	Loans, less repayments	1,644 01
Canada Fund	8,930 32	Administration—General	847 94
		Administration—Canada Fund	1 00
		Suspense account	26 00
		Balance on hand	604 35
		" " Canada Fund	1,187 89
	$ 181,987 44		$ 181,987 44

Yukon Territory

Trustees:

Mr. G. I. MacLean, Chairman.
Mr. Hamilton Daglish.
Mr. John F. MacLennan.

Ex-service men or their dependents who are not eligible for assistance from other sources are helped from this fund. Each case is being dealt with on its own merits.

The following is a statement of receipts and expenditures:—

Fund as at April 1, 1928	$ 5,105 00	Investments at cost	$ 3,573 50
Balance on hand April 1, 1928	951 36	Loans, less repayments	2,785 30
Loans	545 80	Administration	0 50
Amount received from Department of Finance	335 42	Balance on hand	886 59
Interest	305 06		
Profit on sale of bonds	3 25		
	$ 7,245 89		$ 7,245 89

United Kingdom

The Canteen Fund in Great Britain is administered by the United Services Fund, in accordance with the regulations under which the British Canteen Funds operate. A considerable number of deserving cases were looked after and assisted through this fund, in matters pertaining principally to children's education, hospital maintenance and care of convalescing children of ex-service men.

The following is a statement of receipts and expenditures:—

	£ s. d.		£ s. d.
Fund as at April 1, 1928	9,347 14 10	Relief	837 3 2
Interest	216 8 5	Balance on hand	8,727 0 1
	9,564 3 3		9,564 3 3

American Red Cross

The American Red Cross operates the Canteen Fund in the United States, and again reports an increase in the number of loans and grants made during the past year.

There was a slight decrease in the number of cases reported in the Eastern Section, but an increase has again been noted in the Midwestern and Pacific areas during the past twelve months.

Only those men who served in the Canadian Expeditionary Force in France or England, or the Royal Canadian Navy overseas are eligible to be helped from this fund.

The following is a statement of receipts and expenditures:—

Fund as at April 1, 1928	$ 47,512 28	Relief	$ 5,992 52
Interest	1,981 15	Balance in fund	43,500 91
	$ 49,493 43		$ 49,493 43

Imperial Canteen Fund

Trustees:

Colonel G. E. Sanders, C.M.G., D.S.O., Calgary.
Lt.-Colonel A. A. Magee, D.S.O., Montreal.
Lt.-Colonel B. O. Hooper, M.C., D.S.O., Toronto.

The Imperial Canteen Fund through its trustees has continued to render assistance to ex-members of the Imperial forces in Canada.

During the year Brig.-General J. A. Gunn has retired from the trusteeship and his place has been taken by Lt.-Colonel B. O. Hooper.

The following is a statement of receipts and expenditures:—

Investments as at April 1, 1928	$ 12,115 95		
Balance on hand as at April 1, 1928	6,962 31		
Loans outstanding as at April 1, 1928	2,822 00		
Interest	505 90		
Investments as at March 31, 1929		$ 10,096 63	
Loans, less repayments		5,462 30	
Grants		1,629 00	
Administration		203 20	
Balance on hand		5,015 03	
	$ 22,406 16	$ 22,406 16	

APPENDIX No. II

Order in Council P.C. 645, Dated the 15th April, 1929

Amended authority under which the Department of Pensions and National Health may pay compensation in respect of industrial accidents sustained by pensioners of 25 per cent or upwards.

The Committee of the Privy Council have had before them a report, dated April 8, 1929, from the Minister of Pensions and National Health, submitting that by Order in Council P.C. 558, dated March 29, 1927, and previous Orders in Council, the Department of Pensions and National Health has been authorized to reimburse Workmen's Compensation Boards or employers of pensioners of 25 per cent and upwards, when such pensioners have met with industrial accidents, the amount of compensation payable in respect of such accidents. This provision has resulted in the employment of many pensioners who would otherwise have been refused employment on account of their war disabilities. The authority granted to the department expired on March 31, 1929, and it is considered that it should be renewed for a further period of two years, subject to certain modifications.

The minister, therefore, recommends that as from April 1, 1929, the Government of Canada assume the liability imposed by provincial Workmen's Compensation Acts or by common law in respect of industrial accidents, upon employers of disabled former members of the forces to whom a pension of 25 per cent or over is payable by or through the Government of Canada or the British Ministry of Pensions in respect of disabilities received in or attributable to the Great War, subject to the following regulations:—

1. (*a*) "Pensioner" shall mean a former member of the forces resident in Canada, who is in receipt of a pension of not less than 25 per cent, payable by or through the Board of Pension Commissioners for Canada, or the Canadian office of the British Ministry of Pensions, in respect of disabilities incurred during or attributable to service in the Great War.

(*b*) "Department shall mean the Department of Pensions and National Health.

(*c*) "Compensation" shall mean and include all amounts to which a pensioner is, or, in the case of his death, his dependents are, entitled under or by virtue of any Workmen's Compensation Act in force in any province of Canada, or common law.

(*d*) "Full cost of compensation" shall include compensation, burial expenses, the cost of furnishing medical aid, and all other amounts payable under or by virtue of a Workmen's Compensation Act in force in any province of Canada by reason of a pensioner's meeting with an accident or by his contracting an industrial disease, compensable under any of said acts, and shall include the capitalized sum or present value of the amount required, as determined by the Workmen's Compensation Board having jurisdiction with respect thereto, to provide for future payments of compensation to the pensioner or his dependents.

(*e*) "Accident" shall include an industrial disease compensable under a Workmen's Compensation Act in force in the province where such disease is contracted.

2. The department shall pay to the Workmen's Compensation Board, or as it may direct, the full cost of compensation with respect to all accidents to pensioners in the province; such payment or payments to be made upon receiving a certificate from the board of the full cost of compensation, which certificate may be accepted by the department without other proof.

3. Where the employer of a pensioner entitled to compensation is individually liable for the payment thereof under a Workmen's Compensation Act, or under what is known in the Ontario Act as schedule 2, and such employer does not carry insurance with an insurance company covering such liability, the department shall refund to him the full cost of compensation upon his submitting to the department a certificate of the Workmen's Compensation Board, showing the amount thereof.

4. In the event of a claim for damages being made against an employer, who does not carry insurance with an insurance company covering liability in respect of accidents to his employees, by a pensioner who is injured, or by the dependents of a pensioner who dies, by reason of an accident to such pensioner while employed in an industry not within the jurisdiction of a Workmen's Compensation Board, and in the event of liability therefor and the amount of the damages sustained by the pensioner thereby being admitted by the employer with the consent and approval of the department, or if damages be awarded against such employer by any court or authority other than a Workmen's Compensation Board, the department shall submit all the evidence available and a statement of the facts as found by the court or other authority, if the damages shall have been adjudged by any such court or authority, to the Workmen's Compensation Board for the province in which the accident occurred, or if the accident did not occur in a province in which there is a Workmen's Compensation Board, the same shall be submitted to the Workmen's Compensation Board of any adjoining province, or if the accident happens outside of a province, the same shall, in the discretion of the department, be submitted to any Workmen's Compensation Board, for the purpose of ascertaining what amount or amounts such board would allow if the accident were one for which compensation would be payable under the Workmen's Compensation Act of the province for which such board was appointed if the industry were within the jurisdiction of the board, and the department shall pay the amount as agreed upon as aforesaid or awarded by the court or other authority, as the case may be, against the employer if the same be less than the amount as determined by such board, and if it be greater the department shall pay the amount as determined by such board.

5. Where the accident happens outside of a province the employer shall not be entitled to any benefits under these provisions unless the pensioner's employment with such employer commenced in the province and his employment was continuous to the time of the accident and the accident happens within six months from the last time the pensioner was in the province.

6. The department shall not refund to an insurance company any compensation payable by it in respect of an accident sustained by a pensioner whose employer has paid to such insurance company a premium whereby such employer has been insured against liability by such company but the department shall, upon request of the employer and upon his submitting a certificate from the insurance company, refund to him the amount of premium paid by him in respect of such pensioner to the company for the year in which the accident occurred.

7. No payment shall be made by the department in respect of an accident unless notice of such accident is received by the department within six months of its occurrence.

8. In the event of a pensioner who has met with an accident, in respect of which the department is liable under these provisions, requiring treatment for a war service disability while he is in receipt of temporary compensation for such accident, any payment to which he may be entitled by the department while undergoing treatment for his war service disability shall be reduced by the amount of such temporary compensation, provided that when a permanent award has been made, either by the payment of a lump sum or otherwise, because of a permanent disability resulting from such accident, there shall be no reduction from the amount payable by the department during subsequent periods of treatment.

9. This Order in Council shall remain in force until March 31, 1931.

The committee concur in the foregoing recommendations and submit the same for approval.

(Sgd.) E. J. LEMAIRE,
Clerk of the Privy Council.

BOARD OF PENSION COMMISSIONERS FOR CANADA

The Hon. JAMES H. KING, M.D., M.P.,
Minister of Pensions and National Health,
Ottawa, Canada.

SIR,—Pursuant to the provisions of section 4 (2) of chapter 157, Revised Statutes of Canada, as amended by chapter 18-19 George V, I have the honour to submit a report of the work of the Board of Pension Commissioners for the fiscal year ending March 31, 1929.

Since the submission of the Board's last report, the Pension Act has been amended by chapter 38 of 18-19 George V, effective September 1, 1928. A résumé of the amendments with explanatory notes will be found on pages 44 to 52 of the report.

The total number of persons in receipt of benefits under the Pension Act at the close of the period under review was 195,242. This represents an increase of 13,074 over the total for the preceding fiscal year.

The number of disability and dependent pensions in force as at March 31, 1929, was as follows:—

Disability	54,620
Dependent	20,002
Total	74,622

The total pension liability for the period under review was $37,185,308, as against $35,583,853 for the preceding fiscal year, representing an increase of over one and one-half million dollars.

On March 31, 1929, a total of 2,080 pensioners or former pensioners were receiving treatment under the Department of Soldiers' Civil Re-establishment and 26,881 medical examinations for pension purposes were carried out.

Detailed information of the Board's activities and expenditure in connection therewith will be found in the statistics appended as compiled by the Department of Pensions and National Health.

Your obedient servant,

J. PATON,
Secretary.

OTTAWA, December 20, 1929.

LEGISLATION

WITH EXPLANATORY REMARKS

Amendments to the Pension Act, chapter 157 of the Revised Statutes of Canada, 1927, as enacted by chapter 38 of 18-19 George V, passed during the 1928 session of Parliament are as follows:—

NOTE.—*(The marginal numbers refer to the relative sections of chapter 38, 18-19 George V, 1928.)*

1 "1. The Pension Act, chapter one hundred and fifty-seven of the Revised Statutes of Canada, 1927, is amended by striking out the words "Soldiers' Civil Re-establishment," wherever they occur therein, and substituting the words "Pensions and National Health."

2 Paragraphs (*m*) and (*o*) of section two of chapter 157, R.S., were repealed and the following substituted therefor:—

"(*m*) 'Pension' means pension on account of the death or disability of a member of the forces and includes addition to pension, temporary pension, additional payment, final payment or any other payment awarded by the Commission to or in respect of any member of the forces."

The amendment is merely administrative, the only change being the substitution of the word "awarded" for "made."

"(*o*) 'Theatre of actual war' means:—

"(*i*) in the case of the military or air forces, the zone of the allied armies on the continents of Europe, of Asia or of Africa or any other place at which the member of the forces has sustained injury or contracted disease directly by a hostile act of the enemy;

"(ii) in the case of the naval forces, the high seas or wherever contact has been made with hostile forces of the enemy, or any other place at which the member of the forces has sustained injury or contracted disease directly by a hostile act of the enemy."

This section was re-enacted in order to clearly establish that disability the result of injury or disease contracted as a direct result of hostile enemy act is deemed to be contracted in a "theatre of actual war."

3 Section two of chapter 157, R.S., was further amended by inserting therein the following paragraphs:

"(*bb*) 'Board' means the Federal Appeal Board."

"(*dd*) 'Department' means the Department of Pensions and National Health, and includes in respect of matters antecedent to this Act, the Military Hospitals Commission and the Department of Soldiers' Civil Re-establishment."

4 Subsection eight of section three of chapter 157, R.S., which is in part as follows:—

"8. On the approval of the Commission to the award of any pension or to the refusal of any pension, a form shall be placed on the file of the member of the forces by or in respect of whom application for pension has been made which shall bear the personal signature of at least one of the Commissioners and shall contain the following information:—

(*b*) The grounds on which pension is awarded or refused."

was further amended by repealing paragraph (*b*) thereof and substituting therefor the following:—

"(*b*) The grounds on which pension is awarded or refused specifying:—

"(i) The medical classification of the injury or disease causing the disability or death in respect of which the application has been made;

"(ii) The medical classification of such injuries or diseases as have been dealt with by the Commission in connection with the application;

"(iii) Whether the injury or disease resulting in disability or death was or was not attributable to or incurred during military service or whether it pre-existed enlistment and was or was not aggravated during military service."

This amendment incorporated in the statute what had been the practice of the Commission for some years.

5 Sections four to eight inclusive of Chapter 157, R.S., were repealed and the following substituted therefor:—

"4. (1) The Commission shall be attached to the Department and the expenses required to be incurred for the discharge of its duties, including the salaries of its officers, clerks, and other employees shall on approval by the Commission be paid out of the moneys provided by Parliament.

"(2) The Commission shall from time to time make such reports to the Minister as he may direct, and such of the said reports as the Minister may determine shall be included in the annual report of the Department.

"(3) The Commission shall have all the powers and duties of a deputy head of a department for the purpose of the Civil Service Act.

"5. Subject to the provisions of this Act and of any regulations made thereunder, the Commission shall be charged with the duty of considering and adjudicating upon all questions relating to the award, increase, decrease, suspension or cancellation of any pension under this Act and effect shall be given by the Department to the adjudication of the Commission.

"6. The Governor in Council may impose upon the Commission like duties in respect of any grants in the nature of pensions, allowances or gratuities authorized to be made under any statute, other than this Act and effect shall be given to any adjudication by the Commission under any such Act either by the Department or such other department of Government as the Governor in Council may direct."

This amendment is entirely administrative.

6 Section ten of chapter 157, R.S., was repealed and the following substituted therefor:—

"10. With the approval of the Minister, the Commission shall have power to make regulations not inconsistent with this Act in respect of the procedure to be followed in matters coming before it for adjudication."

Self-explanatory.

7 Section thirteen of chapter 157, R.S., was repealed and the following substituted therefor:—

"13. A pension shall not be awarded in respect of the death of a member of the forces, unless an application therefor has been made (*a*) within three years after the date of the death in respect of which pension is claimed; or (*b*) within three years after the date upon which the applicant has fallen into a dependent condition."

As a result of this amendment there is now no statutory time limit in which to apply for disability pension.

8 Section sixteen of chapter 157, R.S., was repealed and the following substituted therefor:—

"16. When a pensioner appears to be incapable of expending or is not expending the pension in a proper manner or is not maintaining the members of his family to whom he owes the duty of maintenance, the Commission may direct that the pension be administered for the benefit of the pensioner and/or the members of his family by the Department or by some person selected by the Commission."

This amendment is administrative and confirms the practice of the Commission.

9 Subsection one of section seventeen of chapter 157, R.S., was repealed and the following substituted therefor:—

"17. When a pensioner has been sentenced to imprisonment for a period of six months or more the payment of his pension shall be discontinued and no pension shall be paid to him for or in respect of the period of his imprisonment; provided however that the Com-

mission shall have discretion to direct the payment of the pension or part of it to any person who was being or was entitled to be supported by the pensioner at the time of his arrest, or if in the opinion of the Commission it would be of exceptional benefit or advantage to the pensioner, the Commission may in its discretion direct the payment of the pension or a part thereof to or for the pensioner himself"

The only change is the substitution in two places of the words " direct the payment of " for the word " pay " and is administrative in nature.

10 Subsections four, five and six of section twenty of chapter 157, R.S., were repealed and the following substituted therefor:—

"(4) Any pension or balance of pension due to a deceased pensioner at the time of his death, whether unpaid or held in trust by the Department, shall not form part of the estate of such deceased pensioner.

"(5) The Commission may, in its discretion direct the payment of such pension or balance of pension either to the pensioner's widow and/or his child or children or to any person who has maintained him or been maintained by him or may direct that it be paid in whole or in part towards the expenses of the pensioner's last sickness and burial.

"(6) If no order for the payment of such pension or balance of pension is made by the Commission such pension or balance of pension shall be paid into the Consolidated Revenue Fund of Canada."

This amendment enlarges the class of persons to whom payment of an unpaid balance of pension may be made to include any person who has maintained the pensioner.

11 Section twenty-one of chapter 157, R.S., was repealed and the following substituted therefor:—

"21. (1) Notwithstanding any of the provisions of this Act, any case respecting a member of the forces or any of his dependents which is claimed to be specially meritorious and in which pension has been refused by the Commission, or if an appeal lies to the Board, both by the Commission and by the Board, may be made the subject of an investigation and adjudication by way of compassionate pension or allowance as hereinafter provided.

"(2) Every claim under this section shall be referred to a special tribunal consisting of two members of the Commission and two members of the Board.

"(3) Such tribunal shall have the power to recommend an award by the Commission of a compassionate pension or allowance not exceeding in amount that which the Commission might in a like case have awarded if the death or disabling condition had been incurred during military service.

"(4) The payment of such compassionate pension or allowance as may be recommended under this section shall be subject to the approval of the Governor in Council.

"(5) In the event of such tribunal being equally divided upon any application a judge of the Exchequer Court of Canada shall join the tribunal as chairman and a decision of a majority thereof shall be final."

This amendment creates a special tribunal with power to hear, and to make recommendations to the Governor in Council upon, applications deemed to be specially meritorious and for which the statute otherwise makes no provision.

12 Subsection one of section twenty-one of chapter 157, R.S., was repealed and the following substituted therefor:—.

"22. No pension shall be paid to or in respect of a child who, if a boy, is over the age of sixteen years or, if a girl, is over the age of seventeen years, except when such child and those responsible for its maintenance are without *adequate* resources, and

"(*a*) such child is unable owing to physical or mental infirmity to provide for its own maintenance, in which case the pension may be paid while such child is incapacitated by physical or mental infirmity from earning a livelihood: Provided that no pension shall be awarded unless such infirmity occurred before the child attained the age of twenty-one years; and that if such child is an orphan the Commission shall have discretion to increase such child's pension up to an amount not exceeding orphan's rates; *or*

"(*b*) such child is following and is making satisfactory progress in a course of instruction approved by the Commission, in which case the pension may be paid until such child has attained the age of twenty-one years."

The only changes made by this amendment are the addition of the words in italics.

13 Subsection five of section twenty-two of chapter 157, R.S., was repealed and the following substituted therefor:—

"(5) The Commission may direct that the pension for a child may be paid to its mother or father or to its guardian or to any person approved by the Commission or may direct that such pension be administered by the Department."

This amendment gives statutory effect to the present practice, whereby pension awarded for the benefit of a child may, when authorized by the Commission, be administered by the Department of Pensions and National Health.

14 Subsection seven of section twenty-two of chapter 157, R.S., reading as follows:—

"7. The children of a pensioner who was pensioned in any of classes one to five mentioned in Schedule A and who has died, shall be entitled to a pension as if he had died on service whether his death was attributable to his service or not: Provided that the death occurs within ten years after the date of retirement or discharge or the date of the commencement of pension."

was repealed and the following substituted therefor:—

"(7) The children of a pensioner who has died and who at the time of his death was in receipt of a pension in any of classes one to five mentioned in Schedule A of this Act, or who, except for the provisions of subsection one of section twenty-nine of this Act, would have been in receipt of a pension in one of the said classes, shall be entitled to a pension as if he had died on service whether his death was attributable to his service or not."

By this amendment the proviso whereby the benefits of the section were limited to deaths occurring within ten years after the date of retirement or discharge or the date of commencement of pension, was removed. Provision was also made whereby such benefits remained in force should the pensioner die while undergoing treatment under the Department of Pensions and National Health.

15 Subsection nine of section twenty-two of chapter 157, R.S., was repealed and the following substituted therefor:—

"(9) On the death of the wife of a pensioner pensioned on account of disability, the additional pension for a married member of the forces may, in the discretion of the Commission, be continued to him for so long as there *is a minor child or* there are minor children of pensionable age, provided there exists a daughter or other person competent to assume and who does assume the household duties and care of the *child or* children."

By this amendment the words in italics above were inserted and require no explanation.

16 Section twenty-two of chapter 157, R.S., was further amended by adding thereto the following subsection:—

"(10) On the death of a widow of a member of the forces who has been in receipt of a pension, the pension for the widow may, in the discretion of the Commission, be continued for so long as there is a minor child or there are minor children of pensionable age, to a daughter competent to assume and who does assume the household duties and care of the other child or children, provided that in such case the pension payable for children shall continue but the rate payable for orphan children shall not apply."

This is a new subsection and gives discretion to the Commission, on the death of a widow, to continue the pension to a daughter who is taking care of other minor children.

17 Subsection four of section twenty-six of chapter 157, R.S., was repealed and the following substituted therefor:—

"(4) A member of the forces in receipt of pension for any other disability for the relief of which any appliance must be worn or treatment applied which causes wear and tear of clothing may, in the discretion of the Commission, be granted an allowance in respect of such wear and tear not exceeding fifty-four dollars per annum."

This amendment gives discretion to the Commission to authorize an allowance not exceeding fifty-four dollars per annum in cases in which there is wear and tear of clothing by reason of appliance worn or treatment applied.

18 Paragraph (*b*) of section twenty-seven of chapter 157, R.S., reading as follows:—

"(*b*) in the case in which a pension is awarded to an applicant the appearance of whose disability was subsequent to his retirement or discharge from the forces, in which case a pension may be paid from a date six months prior to the day upon which application for pension has been received or from the date of the appearance of the disability whichever is the later date;"

was repealed and the following substituted therefor:—

"(*b*) in the case in which a pension is awarded to an applicant the appearance of whose disability was subsequent to his retirement or discharge from the forces, in which case a pension may be paid from a date six months prior to the day upon which application for pension has been received or from the date of the appearance of the disability whichever is the later date, or from the day upon which application was made to the Department for treatment in respect of the injury or disease resulting in the disability for which pension is awarded; provided that if treatment was commenced under the jurisdiction of the Department in respect of such injury or disease resulting in disability, a pension may be paid from the day following that upon which the treatment of the applicant by the Department was completed."

The section as re-enacted makes provision, in the case of a member of the forces discharged without disability, whereby an application for treatment may be regarded as an application for pension.

19 Subsection one of section twenty-eight of chapter 157, R.S., was repealed and the following substituted therefor:—

"28. (1) If an applicant or pensioner should in the opinion of the Commission undergo medical or surgical treatment, and the applicant or pensioner in the opinion of the Commission unreasonably refuses to undergo such treatment, the pension to which the extent of his disability would otherwise have entitled him may be reduced, in the discretion of the Commission, by not more than one-half, *provided that this subsection shall not apply to a refusal to undergo a major surgical operation.*"

The words in italics constitute the only change, and are self-explanatory.

20 Section 29 of chapter 157, R.S., reading as follows:—

"29. When a pensioner commences treatment under the jurisdiction of the Department of Soldiers' Civil Re-establishment, and his pension, including the pension, if any, for his dependents, is greater than the pay and allowances issued by that Department, there shall be deducted from such pension towards the cost of maintenance in hospital an amount equal to the difference between such pension and such pay and allowances."

was repealed and the following substituted therefor:—

"29. (1) During such time as, under the departmental regulations in that behalf, a pensioner is in receipt of pay and allowances from the Department while under treatment, payment of his pension shall be suspended and the pay and allowances shall stand in lieu thereof; pending a fresh award, payment of the pension shall recommence forthwith after the termination of such suspension.

"(2) During such time as, under the departmental regulations in that behalf, a pensioner is an in-patient under treatment in respect of a disability other than his pensionable disability, his pension, if in excess of the amount he would have been entitled to receive by way of pay and allowances, if the disability for which he is under treatment had been pensionable, shall be reduced to such amount; pending a fresh award the payment of pension in full shall recommence forthwith upon the pensioner's ceasing to be an in-patient as aforesaid."

Under subsection (1) as enacted, provision is made for the suspension of pension while a pensioner is receiving treatment with pay and allowances under the Department of Pensions and National Health.

Under subsection (2) provision is made for the reduction of pension to the equivalent of pay and allowances when a pensioner is accepted for treatment, without pay and allowances.

21 Subsection three of section thirty of chapter 157, R.S., was repealed and the following substituted therefor:—

"(3) When a pensioner previous to his enlistment or during his service was maintaining or was substantially assisting in maintaining one or both of his parents or a person in the place of a parent an amount not exceeding the amount set forth in Schedule A of this Act as the additional pension for one child may, in the discretion of the Commission, be paid direct to each of such parents or person in the place of a parent or to him so long as he continues such maintenance; provided that the benefits of this subsection shall be limited to a parent or parents or a person in the place of a parent who is, are or would be, if the pensioner did not contribute, in a dependent condition, and that if the Commission is of opinion that the pensioner is unable by reason of circumstances beyond his control to continue his contribution towards the maintenance of his parent or parents or a person in the place of a parent the Commission may continue the said benefits."

By this amendment a "person in the place of a parent" is, for the purposes of additional pension as the dependent of a disability pensioner, placed in the category of a parent.

22 Section thirty of chapter 157, R.S., was further amended by adding thereto the following subsection:—

"(4) When a parent or person in the place of a parent who was not wholly or to a substantial extent maintained by the pensioner previous to his enlistment or during his service by reason of the fact that such parent or person was not then in a dependent condition, subsequently falls into a dependent condition, is incapacitated by mental or physical infirmity from earning a livelihood and is wholly or to a substantial extent maintained by the pensioner, an amount not exceeding the amount set forth in Schedule A of this Act as the additional pension for one child may, in the discretion of the Commission, be paid direct to each of such parents or person in the place of a parent or to the pensioner for so long as he continues such maintenance."

This subsection is new and gives discretionary authority to the Commission to award additional pension to a disability pensioner on account of a parent or person in the place of a parent, who, though not dependent upon him prior to or during service, subsequently falls into a dependent condition and is substantially maintained by him.

23 Section thirty-one of chapter 157, R.S., was repealed and the following substituted therefor:—

"31. When a pensioner pensioned on account of a disability has died and his estate is not sufficient to pay the expenses of his last sickness and burial, the Commission may direct the payment of such expenses, or a portion thereof, but the payment in any such case shall not exceed one hundred and fifty dollars; provided that the payment in respect of burial shall not exceed one hundred dollars."

This amendment increases by fifty dollars the amount which may be authorized by the Commission in respect of funeral and last sickness expenses of a deceased disability pensioner.

24 Subsection one of section thirty-two of chapter 157, R.S., reading as follows:—

"32. No pension shall be paid to the widow of a member of the forces unless she was married to him before the appearance of the injury or disease which resulted in his death, and in the case of the widow of a pensioner unless she was living with him or was maintained by him or was in the opinion of the Commission, entitled to be mantained by him at the time of his death and for a reasonable time previously thereto."

was repealed and the following substituted therefor:—

"32. (1) No pension shall be paid to the widow of a pensioner unless she was living with him or was maintained by him or was, in the opinion of the Commission, entitled to be maintained by him at the time of his death and for a reasonable time previously thereto.

"(i) No pension shall be paid to the widow of a member of the forces unless she was married to him before the appearance of the injury or disease which resulted in his death,—

"(*a*) unless the injury in respect of which he was pensioned or entitled to pension would not shorten his expectancy of life; or

"(*b*) unless he was not chronically ill of a pensionable disease and not in receipt of pension in respect thereof.

"(ii) This subsection shall not be held to authorize any payment of a pension for any period anterior to the date of the coming into force of this Act."

The principle that pension was not to be paid to a widow who married subsequent to the appearance of the injury or disease which resulted in her husband's death was, by this amendment, radically changed, and provision made whereby a widow is pensioned if, at the time of marriage, her husband was not chronically ill of a pensionable disease and not in receipt of pension in respect thereof or, in the case of a wound, that his expectancy of life had not thereby been shortened.

25 Subsection two of section thirty-two of chapter 157, R.S., reading as follows:—

"2. Subject to paragraph one of this section, the widow of a pensioner who, previous to his death, was pensioned for disability in any of the classes one to five mentioned in Schedule A shall be entitled to a pension as if he had died on service whether his death was attributable to his service or not: Provided that the death occurs within ten years after the date of retirement or discharge or the date of commencement of pension."

was repealed and the following substituted therefor:—

"(2) Subject to subsection one of this section, the widow of a pensioner who has died and who at the date of his death was in receipt of a pension in any of classes one to five mentioned in Schedule A of this Act, or who, except for the provisions of subsection one of section twenty-nine of this Act, would have been in receipt of a pension in one of the said classes, shall be entitled to a pension as if he had died on service whether his death was attributable to his service or not, provided that the death occurs within ten years after the date of retirement or discharge or the date of commencement of pension."

This amendment preserves a widow's rights in so far as they are dependent upon her husband being a pensioner in classes one to five at the time of his death, should death occur while he is receiving treatment under the department, pension being suspended over that period in accordance with other provisions of the statute.

26 Subsection three of section thirty-two of chapter 157, R.S., was repealed and the following substituted therefor:—

"(3) A woman who, although not married to the member of the forces, was living with him in Canada at the time he became a member of the forces and for a reasonable time previously thereto, and who, at such time, was publicly represented by him as his wife may, in the case of his death and in the discretion of the Commission, be awarded a pension equivalent to the pension she would have received had she been his legal widow, and the Commission may also award a pension if, in its opinion, an injustice would be done by not recognizing a woman as the wife of a member of the forces although there is no evidence that she had been publicly represented by him as his wife. Provided that such woman shall not be refused a pension for which she would have been eligible under the provisions hereof if she had remained unmarried, by reason only of her having married the member of the forces with whom she had been living as aforesaid."

The only change is in the addition of the proviso which preserves the rights under this section of a woman who subsequently marries the man with whom she had been formerly living.

27 Paragraph (*a*) of section thirty-seven of chapter 157, R.S., was repealed and the following substituted therefor:—

"(*a*) in the case in which a pension is awarded to a parent *or person in place of a parent* who was not wholly or to a substantial extent maintained by the member of the forces at the time of his death, in which case the pension shall be paid from a day to be fixed in each case by the Commission."

The words in italics constitute the change in this subsection and correct what was recognized as an error in drafting the original statute.

28 Section fifty of chapter 157, R.S., was further amended by adding thereto the following subsections:—

"(10) The Board shall be attached to the Department and the expenses required to be incurred for the discharge of its duties, including the salaries of its officers, clerks, and other employees shall, on approval by the Board, be paid out of the moneys provided by Parliament.

"(11) The Board shall furnish the Minister with an annual report and such report shall be embodied in the annual report of the Department."

This amendment has reference only to the Federal Appeal Board and is self-explanatory.

29 Subsection one of section fifty-one, chapter 157, R.S., reading as follows:—

"51. Upon the evidence and record upon which the Commission gave its decision an appeal shall lie in respect of any refusal of pension by the Commission on the ground that the injury or disease or aggravation thereof resulting in disability or death was not attributable to or was not incurred during military service."

was amended by adding thereto the following:—

"If the medical classification of the injury or disease resulting in disability or death in respect of which an application has been refused by the Commission is considered by the Board to be in error, the Board shall, before issuing judgment, communicate in writing to the Commission its reasons for considering such medical classification to be in error, whereupon the dispute as to the medical classification shall be referred by the Commission to a board consisting of three medical experts, one to be named by the Commission, another to be named by the Board, and the third to be agreed upon by the two as named, and in the event of their failure to agree, to be named by the Minister, which board of experts shall be requested to determine the medical classification to be acted upon by the Commission in rendering its decision If, upon the medical classification so determined, pension is refused by the Commission, the Board shall give the appeal such further consideration as it may deem necessary, and issue its judgment on the medical classification determined as hereinbefore provided."

Self-explanatory.

30 Subsections four to eight of section fifty-one of chapter 157, R.S., were repealed and the following substituted therefor:—

"(4) Any person desiring to appeal from a decision of the Commission may do so by notice thereof in writing delivered to the Department or to the Board on or before the thirty-first day of December, A.D. 1928, or within two years from the date of the decision complained of.

"(5) The decision of the Board on such appeal shall be final and shall be binding upon the applicant and upon the Commission, provided that if before the thirty-first day of December, A.D. 1928, or within one year from the date of the decision of the Board upholding a refusal of pension by the Commission the applicant submits newly discovered evidence which, in the opinion of the Commission, raises a reasonable doubt of the correctness of the decision, the Commission shall reconsider the case and if pension is again refused the applicant shall have the right of a second appeal to the Board whose decision on such second appeal shall be final and shall be binding upon the applicant and upon the Commission.

"(6) Every applicant and the Board of Pension Commissioners for Canada or its representative shall have the right to attend in person, at any and all sittings for the purpose of hearing an appeal held by the Board or by a member thereof, under such conditions as to the payment of an applicant's expenses thereby incurred as may be fixed by regulation

of the Governor in Council, and the applicant may if he so desires, but at his own expense, be assisted thereat, by counsel or representative other than the official Soldier Adviser appointed by the Department.

"(7) Every judgment rendered by the Board shall be signed by the Chairman or presiding member of the Board and the Secretary and shall contain the following information:—

"(i) the name or names of the member or members of the Board who heard the appeal;

"(ii) the medical classification of the injury or disease causing the disability or death in respect of which the appeal was made;

"(iii) the medical classification of the injury or disease causing the disability or death in respect of which the appeal is allowed or disallowed as the case may be;

"(iv) If the appeal is allowed, whether the injury or disease resulting in disability or death was attributable to or incurred during military service or whether it pre-existed enlistment and was or was not aggravated during military service.

"(8) Any dispute as to the jurisdiction of the Board to entertain and determine appeals from refusal of pension by the Commission shall be referred by the Department to the Exchequer Court for determination."

These amendments revise the procedure on appeal and provide for the granting of a second appeal in cases in which new evidence is discovered subsequent to the hearing of the first appeal. Provision is also made for reference to the Exchequer Court of any dispute which may arise as to the jurisdiction of the Federal Appeal Board to hear an appeal.

31 The following addition was made to "Schedule A," chapter 157, R.S.:—

"Class 21—Disabilities below 5 per cent. All ranks. A final payment not exceeding $100."

This section merely replaces a footnote to "Schedule A," which, through a clerical error, was omitted in a previous revision of the statute.

32 The following section was added to chapter 157, R.S., as section fifty-four thereof:—

"54. The Department shall from time to time prepare an office consolidation of this Act for distribution but no such office consolidation shall operate so as to vary or affect the operation of the provisions of the Act as passed and amended by Parliament."

Self-explanatory.

STATISTICS

(As compiled by the Department of Pensions and National Health)

SUMMARY OF PENSION ACTIVITIES DURING THE FISCAL YEAR ENDING MARCH 31, 1929

DISABILITIES

Disability pensions in force March 31, 1928	50,635
Disability pensions awarded during the fiscal year ending March 31, 1929	2,557
Disability pensions reinstated during the fiscal year ending March 31, 1929	2,322
Total	55,514
Disability pensions discontinued during the fiscal year ending March 31, 1929	894
Total number of pensions in force March 31, 1929	54,620

DEPENDENTS

Dependent pensions in force March 31, 1928	19,975
Dependent pensions awarded during the fiscal year ending March 31, 1929	722
Dependent pensions reinstated during fiscal year ending March 31, 1929	61
Total	20,758
Dependent pensions discontinued during the fiscal year ending March 31, 1929	756
Total number of pensions in force March 31, 1929	20,002

SUMMARY OF PENSION ACTIVITIES DURING THE FISCAL YEAR ENDING MARCH 31, 1929—*Concluded*

DISABILITIES AND DEPENDENTS

Total pensions in force March 31, 1928	70,610
Total pensions awarded during the fiscal year ending March 31, 1929	3,279
Total pensions reinstated during the fiscal year ending March 31, 1929	2,383
Total	76,272
Total pensions discontinued during the fiscal year ending March 31, 1929	1,650
Total number of pensions in force March 31, 1929	74,622

STATEMENT OF PENSION ACTIVITIES DURING THE FISCAL YEAR ENDING MARCH 31, 1929

——	Number	Annual Liability
		$ cts.
Pensions awarded—		
Disabilities	2,557	520,331 00
Dependents	722	349,552 00
Total	3,279	869,883 00
Pensions reinstated—		
Disabilities	2,322	491,853 00
Dependents	61	19,548 00
Total	2,383	511,401 00
Pensions discontinued—		
Disabilities	894	541,855 00
Dependents	756	283,419 00
Total	1,650	825,274 00
Final payments (gratuity) on award and amount thereof	331	25,475 00
Additional gratuities awarded	47	2,625 00
Gratuities awarded subsequent to discontinuation of pension	42	2,800 00
*Total	420	30,900 00
Pensions refused—		
(1) Number of injuries or diseases	12,710	
(a) Number of applicants re above	7,776	
(2) Dependents	1,095	
Additional or other allowances refused—		
Dependent and disability pensioners	215	
Federal Appeal Board—		
Awards in force resulting from judgments of F.A.B. (included above)	316	139,299 00
*Gratuities awarded resulting from judgments of F.A.B. (included above)	4	250 00

*Does not form part of annual liability.

COMPARATIVE STATEMENT SHOWING PENSIONS IN FORCE UNDER THE PENSION ACT AS AT THE END OF THE FISCAL YEARS 1918 TO 1929

Year ending March 31	Pensions in force	Liability
		$ cts.
Dependents—		
1918	10,488	4,168,602 00
1919	16,753	9,593,055 50
1920	17,823	10,841,169 50
1921	19,209	12,954,140 54
1922	19,606	12,687,237 00
1923	19,794	12,279,621 00
1924	19,971	12,037,843 00
1925	20,015	11,804,825 00
1926	20,005	11,608,530 00
1927	19,999	11,419,276 00
1928	19,975	11,209,351 00
1929	20,002	11,090,158 00

COMPARATIVE STATEMENT SHOWING PENSIONS IN FORCE UNDER THE PENSION ACT AS AT THE END OF THE FISCAL YEARS 1918 TO 1929—*Concluded*

Year ending March 31	Pensions in force	Liability
		$ cts.
Disabilities—		
1918	15,335	3,105,125 55
1919	42,932	7,470,729 02
1920	69,203	14,335,118 41
1921	51,452	18,230,697 16
1922	45,133	17,991,535 00
1923	43,263	18,142,145 00
1924	43,300	18,787,206 00
1925	44,598	19,816,380 00
1926	46,385	21,456,941 00
1927	48,027	22,811,373 00
1928	50,635	24,374,502 00
1929	54,620	26,095,150 00
Totals—		
1918	25,823	7,273,727 55
1919	59,685	17,063,784 52
1920	87,026	25,176,287 91
1921	70,661	31,184,837 70
1922	64,739	30,678,772 00
1923	63,057	30,421,766 00
1924	63,271	30,825,049 00
1925	64,613	31,621,205 00
1926	66,390	33,065,471 00
1927	68,026	34,230,649 00
1928	70,610	35,583,853 00
1929	74,622	37,185,308 00

STATEMENT GIVING THE DOMICILIARY DETAIL OF PENSIONERS AND ANNUAL LIABILITY AS AT MARCH 31, 1929

Resident in	Disabilities				Dependents				Total			
	No.	Per-centage	Annual liability	Per-centage	No.	Per-centage	Annual liability	Per-centage	No.	Per-centage	Annual liability	Per-centage
			$				$				$	
Quebec	3,784	6·9	1,843,673	7·1	1,558	7·8	920,428	8·3	5,342	7·2	2,764,101	7·4
Nova Scotia and Prince Edward Island	3,105	5·7	1,500,101	5·7	1,263	6·3	652,508	5·9	4,368	5·8	2,152,609	5·8
Eastern Ontario	3,251	6·0	1,500,571	5·7	986	4·9	589,269	5·3	4,237	5·7	2,089,840	5·6
Central Ontario	11,104	20·3	5,534,283	21·2	4,138	20·7	2,553,677	23·0	15,242	20·4	8,087,960	21·8
Western Ontario	3,317	6·0	1,737,187	6·7	941	4·7	557,434	5·0	4,258	5·7	2,294,621	6·2
Manitoba	5,402	9·9	2,368,402	9·1	1,262	6·3	737,718	6·6	6,664	8·9	3,106,120	8·4
Saskatchewan	3,318	6·1	1,495,052	5·7	568	2·8	310,454	2·8	3,886	5·2	1,805,506	4·8
Alberta	4,290	7·9	1,989,223	7·6	815	4·1	480,304	4·3	5,105	6·8	2,469,527	6·6
British Columbia	6,716	12·3	3,160,131	12·1	1,716	8·6	1,113,716	10·0	8,432	11·3	4,273,847	11·5
New Brunswick	1,561	2·9	781,886	3·0	677	3·4	352,356	3·2	2,238	3·0	1,134,242	3·0
Great Britain	3,114	5·7	1,708,041	6·6	4,150	20·7	1,858,618	16·8	7,264	9·8	3,566,659	9·6
United States	5,239	9·6	2,273,143	8·7	1,623	8·1	843,332	7·6	6,862	9·2	3,116,475	8·4
*Other countries	419	0·7	203,457	0·8	305	1·6	120,344	1·2	724	1·0	323,801	0·9
Total	54,620	100.	26,095,150	100	20,002	100	11,090,158	100	74,622	100	37,185,308	100

*Note.—Pensioners residing in other countries are as follows:—

Africa	26	Denmark	10	India	5	Pacific Islands	15
Australia	116	East Indies	1	Italy	34	Roumania	2
Austria	1	Egypt	2	Japan	28	Russia	14
Belgium	37	Finland	1	Mexico	14	Serbia	4
Bermuda	16	France	55	Montenegro	7	South America	13
British West Indies	43	Germany	3	Newfoundland	94	Spain	1
Central America	1	Greece	11	New Zealand	64	Straits Settlements	1
China	4	Holland	6	Switzerland	4	Sweden	14
Czecho-Slovakia	1	Norway	10	Islands contiguous to Great Britain	59	Turkey	1
		Iceland	2	Poland	3	Total	724

STATEMENT SHOWING THE NUMBER OF PERMANENT DISABILITY PENSIONS IN FORCE AS AT MARCH 31, 1929

Resident in	Total number of pensions	Number of pensions permanent	Percentage of pensions permanent
Quebec	3,784	1,310	2·3
Nova Scotia and Prince Edward Island	3,105	1,071	1·9
Eastern Ontario	3,251	989	1·8
Central Ontario	11,104	3,988	7·3
Western Ontario	3,317	1,268	2·3
Manitoba	5,402	1,840	3·3
Saskatchewan	3,318	1,237	2·2
Alberta	4,290	1,536	2·8
British Columbia	6,716	2,474	4·5
New Brunswick	1,561	561	1·0
Great Britain	3,114	1,583	2·8
United States	5,239	2,173	3·9
Other countries	419	167	0·3
Total	54,620	20,197	36·9

STATEMENT SHOWING COUNTRY WHERE PENSIONABLE DISABILITY ORIGINATED

—	Number	Percentage	Liability
			$
France	47,120	86·1	22,510,665
England	4,932	9·3	2,287,803
Canada	2,263	4·1	1,149,342
Other theatres of war	305	0·5	147,340
Total	54,620	100	26,095,150

STATEMENT SHOWING THEATRE OF WAR WHERE DECEASED SOLDIER SERVED, NUMBER AND ANNUAL LIABILITY OF DEPENDENT PENSIONS IN FORCE ON HIS BEHALF AS AT MARCH 31, 1929

Theatre of War	Number	Percentage	Liability
			$
France	17,519	87·5	9,551,203
England	1,194	5·9	750,101
Canada	991	4·10	639,642
Other theatres of war	298	1·6	149,212
Total	20,002	100	11,090,158

STATEMENT SHOWING THE NUMBER OF DISABILITY PENSIONS IN FORCE AS AT MARCH 31, 1929, CLASSIFIED UNDER SCHEDULE "A" OF THE PENSION ACT, ALSO INDICATING COUNTRY WHERE PENSIONABLE DISABILITY ORIGINATED

Class	Country of Origin				Degree of disability	Number of pensions	Annual liability
	France	England	Canada	Other theatres of war			
							$
1	3,281	459	281	41	100	4,062	5,383,101
2	41	1	1	.....	95	43	57,274
3	248	85	40	1	90	374	455,850
4	179	7	4	.....	85	190	220,830
5	1,120	103	56	9	80	1,288	1,381,098
6	1,243	84	41	4	75	1,372	1,392,704
7	1,238	69	35	3	70	1,345	1,292,077
8	497	21	11	.....	65	529	464,378
9	1,753	162	60	18	60	1,993	1,603,554
10	264	19	14	2	55	299	219,580
11	3,188	326	161	12	50	3,687	2,485,834
12	654	36	18	2	45	710	429,987
13	3,422	308	143	13	40	3,886	2,089,031
14	1,390	118	48	8	35	1,564	734,865
15	3,694	371	145	20	30	4,230	1,709,013
16	3,935	431	183	20	25	4,569	1,532,724
17	6,664	696	277	37	20	7,674	2,050,025
18	6,925	711	315	53	15	8,004	1,602,345
19	4,952	601	274	44	10	5,871	792,206
20	2,432	324	156	18	5	2,930	198,674
	47,120	4,932	2,263	305	.....	54,620	26,095,150

STATEMENT SHOWING THE NUMBER AND ANNUAL LIABILITY OF DISABILITY PENSIONS IN FORCE AS AT MARCH 31, 1929, GROUPED UNDER MEDICAL NOMENCLATURE, WITH THE PERCENTAGE OF EACH GROUP TO THE WHOLE

	Temporary		Permanent		Total	Annual Liability		
	Number	Percentage	Number	Percentage		Temporary	Permanent	Total
						$	$	$
General diseases	593	86·2	95	13·8	688	298,011	36,062	334,073
Nervous system	3,161	65·7	1,649	34·3	4,810	1,483,019	711,482	2,194,501
Special senses	2,987	54·5	2,489	45·5	5,476	1,119,959	1,292,900	2,412,859
Circulatory system	6,134	93·8	408	6·2	6,542	2,943,313	172,748	3,116,061
Respiratory system	10,396	95·6	481	4·4	10,877	6,455,146	183,788	6,628,934
Digestive system	1,717	81·2	398	18·8	2,115	640,055	96,014	736,069
Urinary and genital	1,350	91·2	130	8·8	1,480	629,343	52,359	681,702
Amputation and disarticulation	421	9·7	3,915	90·3	4,336	360,367	3,315,326	3,675,693
Ankylosis	216	13·1	1,441	86·9	1,657	122,531	681,994	804,525
Fractures	6,078	52·8	5,431	47·2	11,509	2,313,356	1,760,952	4,074,308
Other conditions	1,370	26·7	3,760	73·3	5,130	423,635	1,012,790	1,436,425
Total	34,423	63·0	20,197	36·1	54,620	16,778,735	9,316,415	26,095,150

STATEMENT SHOWING THE NUMBER AND ANNUAL LIABILITY OF TEMPORARY AND PERMANENT DISABILITY PENSIONS IN FORCE, AS AT MARCH 31, 1929, UNDER MEDICAL NOMENCLATURE, ALSO BY MEDICAL GROUPS AND PERCENTAGE OF EACH GROUP TO THE WHOLE

Medical Nomenclature and Groups	Number			Annual Liability		
	Temporary	Permanent	Total	Temporary	Permanent	Total
				$	$	$
General Diseases—						
Cerebro-spinal fever	12	4	16	7,581	2,490	10,071
Diabetes	84	2	86	60,753	1,507	62,260
Dysentry	12	1	13	4,202	93	4,295
Enteric	4	1	5	1,425	240	1,665
Exophthalmic goitre	96	2	98	44,948	447	45,395
Gas effects	45	3	48	20,906	612	21,518
Rheumatic fever	16	3	19	9,690	1,806	11,496
Miscellaneous general diseases	324	79	403	148,506	28,867	177,373
Group total	593	95	688	298,011	36,062	334,073
Percentage	1·7	0·5	1·2	1·8	0·4	1·3
Nervous System—						
Acute anterior poliomyelitis	4	4	8	1,530	2,058	3,588
Dementia praecox	166	4	170	116,191	3,117	119,308
Epilepsy	219	20	239	156,313	16,566	172,879
General paralysis of insane	25	6	31	10,167	1,962	12,129
Insanity unclassified	84	8	92	67,359	5,556	72,915
Nerve injuries	442	1,403	1,845	216,149	584,432	800,581
Neurasthenia	1,647	84	1,731	638,906	27,030	665,936
Neuritis	256	46	302	82,426	14,838	97,264
Otherwise unclassified	318	74	392	193,978	55,923	249,901
Group total	3,161	1,649	4,810	1,483,019	711,482	2,194,501
Percentage	9·2	8·2	8·8	8·8	7·6	8·4
Special Senses—						
Blindness or loss of one or both eyes	137	1,075	1,212	109,098	734,487	843,585
Defective vision	503	632	1,135	244,535	303,775	548,310
Deafness, total	13	35	48	6,363	18,475	24,838
Defective hearing	2,334	747	3,081	759,963	236,163	996,126
Group total	2,987	2,489	5,476	1,119,959	1,292,900	2,412,859
Percentage	8·7	12·3	10·1	6·7	13·9	9·3
Circulatory System—						
Disordered action of the heart	2,086	65	2,151	861,032	21,252	882,284
Myocardial disease	472	34	506	269,270	27,003	296,273
Valvular disease of the heart	2,394	104	2,498	1,416,554	66,369	1,482,923
Varix	721	140	861	170,545	24,002	194,547
Otherwise unclassified	461	65	526	225,912	34,122	260,034
Group total	6,134	408	6,542	2,943,313	172,748	3,116,061
Percentage	17·9	2·0	12·1	17·6	1·8	11·9
Respiratory System—						
Asthma	578	22	600	363,655	17,061	380,716
Bronchitis	3,904	108	4,012	1,657,402	40,819	1,698,221
Empyema	185	48	233	89,380	14,235	103,615
Injuries otherwise unclassified	295	126	421	122,584	35,507	158,091
Pleurisy	233	29	262	90,247	9,655	99,902
Tubercle of the lung	4,894	105	4,999	3,986,009	48,346	4,034,355
Disease otherwise unclassified	307	43	350	135,869	18,165	154,034
Group total	10,396	481	10,877	6,445,146	183,788	6,628,934
Percentage	30·2	2·4	19·9	38·5	2·0	25·4

STATEMENT SHOWING THE NUMBER AND ANNUAL LIABILITY OF TEMPORARY AND PERMANENT DISABILITY PENSIONS IN FORCE, AS AT MARCH 31, 1929, UNDER MEDICAL NOMENCLATURE, ALSO BY MEDICAL GROUPS AND PERCENTAGE OF EACH GROUP TO THE WHOLE—*Concluded*

Medical Nomenclature and Groups	Number			Annual Liability		
	Temporary	Permanent	Total	Temporary	Permanent	Total
				$	$	$
Digestive System—						
Adhesions of the peritoneum	142	20	162	52,382	5,466	57,848
Hernia	442	295	737	141,052	58,800	199,852
Haemorrhoids	77	7	84	17,841	819	18,660
Otherwise unclassified	1,056	76	1,132	428,780	30,929	459,709
Group total	1,717	398	2,115	640,055	96,014	736,069
Percentage	5·0	2·0	3·8	3·8	1·0	2·8
Urinary and Genital—						
Nephritis	1,037	35	1,072	474,252	12,921	487,173
Otherwise unclassified	242	57	299	120,282	22,371	142,653
Genital system	71	38	109	34,809	17,067	51,876
Group total	1,350	130	1,480	629,343	52,359	681,702
Percentage	3·9	0·6	2·8	3·7	0·5	2·6
Amputation and Disarticulation—						
Shoulder	3	55	58	3,211	60,686	63,897
Upper arm	34	512	546	42,240	552,376	594,616
Elbow and forearm	21	236	257	22,910	241,105	264,015
Hand or portion or hand	95	787	882	40,483	280,485	320,568
Hip or thigh	132	1,398	1,530	153,707	1,453,635	1,607,342
Knee, leg or ankle	81	744	825	75,907	658,891	734,798
Foot or portion of foot	55	183	238	22,309	68,148	90,457
Group total	421	3,915	4,336	360,367	3,315,326	3,675,693
Percentage	1·2	19·4	7·9	2·1	35·7	14·1
Ankylosis—						
Shoulder	28	170	198	15,016	75,321	90,337
Elbow	28	279	307	20,346	153,432	173,778
Wrist	12	133	145	5,244	65,547	70,791
Knee	53	351	404	30,214	139,978	170,192
Hip	25	110	135	22,028	92,206	114,234
Ankle	21	167	188	9,663	64,349	74,012
Otherwise unclassified	34	162	196	10,473	48,366	58,839
False and flail joints	15	69	84	9,547	42,795	52,342
Group total	216	1,441	1,657	122,531	681,994	804,525
Percentage	0·6	7·1	3·0	0·7	7·3	3·1
Fracture—						
Skull and jaw	557	436	993	318,956	186,655	505,611
Bones of thorax	37	59	96	15,784	20,217	36,001
Arm	195	1,139	1,334	84,704	441,456	526,160
Leg	285	1,009	1,294	118,331	322,332	440,663
Fractures otherwise unclassified	123	414	537	45,632	129,690	175,322
Flat feet	478	302	780	112,782	53,098	165,880
Myalgia	941	79	1,020	281,005	19,877	300,882
Osseous-connective tissue system otherwise unclassified	3,462	1,993	5,455	1,336,162	587,627	1,923,789
Group total	6,078	5,431	11,509	2,313,356	1,760,952	4,074,308
Percentage	17·6	26·9	21·0	13·8	18·9	15·6
Other Conditions—						
Disease of the skin	123	22	145	38,159	6,263	44,422
Adherent scar	329	1,300	1,629	105,484	325,144	430,628
Disfigurement	47	83	130	21,839	38,214	60,053
Wounds otherwise unclassified	871	2,365	3,226	258,153	643,169	901,322
Group total	1,370	3,760	5,130	623,635	1,012,790	1,436,425
Percentage	4·0	18·6	9·4	2·5	10·9	5·5

Disability Pensions in Force as at March 31, 1929.

CONSOLIDATED STATEMENT BY RANK ON DISCHARGE FROM C.E.F.

Rank	Ex-soldiers	Percentage	Amount	Percentage
			$	
Private	46,125	84·44	22,004,781	84·33
Sergeant	4,940	9·05	2,318,966	8·89
R.S.M.	223	0·40	96,310	0·37
W.O.	98	0·18	44,229	0·17
Lieutenant	1,540	2·82	726,477	2·79
Captain	861	1·58	437,716	1·68
Major	380	0·69	216,835	0·83
Lt.-Colonel	136	0·26	102,141	0·39
Colonel	11	0·02	8,479	0·03
Brig.-General and upwards	7	0·01	9,984	0·03
Nurses—Lieutenant	296	0·54	127,524	0·48
Captain	3	0·01	1,708	0·01
Total	54,620	100·	26,095,150	100·

STATEMENT SHOWING THE TOTAL NUMBER OF PERSONS IN RECEIPT OF BENEFITS UNDER THE PENSION ACT AS AT MARCH 31, 1929

	Number	Total
Disability pensioners	54,620	
Disability pensioners' wives	40,160	
Disability pensioners' children	69,267	
Disability pensioners' other relatives	1,304	
Disability pensioners' (Widowers, Section 22-9 Pension Act)	155	
		165,506
Dependent pensioners	20,002	
Dependent pensioners' children	7,613	
Other relatives in addition to main dependents	1,683	
		29,298
Supplementary Awards		
Disability—		
Pension Act (sections 48 and 49 Pension Act)	32	
Supplementary to awards paid by Great Britain (sections 45 and 47 Pension Act)	284	
R.N.W.M. Police Supplementary (section 48 Pension Act)	3	
		319
Dependent—		
Pension Act (sections 48 and 49 Pension Act)	8	
Supplementary to awards paid by Great Britain (sections 46 and 47 Pension Act)	71	
Supplementary to awards paid by Belgium (section 46 Pension Act)	1	
Supplementary to awards paid by France (section 46 Pension Act)	36	
Supplementary to awards paid by Italy (section 46 Pension Act)	3	119
Grand Total		195,242

Miscellaneous Pensions

Pension Act, 1901	996
Order in Council P.C. 2187	1
Pension Act (1885 and General)	71
R.N.W.P.	3
Total	1,071

*Annuities in Respect of Decorations Awarded to Canadians in the Great and Other Wars

Victoria Cross (5 in receipt of both pension and annuity)	17
Military Cross or Distinguished Conduct Medal (in receipt of both pension and annuity)	271
Total	288

*These annuities are paid by Great Britain.

Dependent Pensioners

STATEMENT SHOWING THE NUMBER OF DEPENDENT PENSIONERS, RELATIONSHIP AND ANNUAL LIABILITY IN RESPECT THERETO AS AT MARCH 31, 1929

Relationship to deceased soldier	Number of pensions	Annual liability
		$
Widow	7,837	6,726,233
Mother	5,951	2,409,677
Father	876	254,957
Orphan children	456	215,452
Grandparents	32	13,418
Brothers and sisters	50	14,374
Orphan brothers and sisters	11	3,228
Other relatives	7	4,596
Children	3,236	896,810
Parents	1,546	551,413
Total	20,002	11,090,158

STATEMENT SHOWING THE NUMBER OF DEPENDENTS OF DISABILITY PENSIONERS ON WHOSE ACCOUNT ALLOWANCES ARE BEING PAID AS AT MARCH 31, 1929

Wives	40,160
Children	69,267
Mothers	1,025
Fathers	131
Parents	144
Others	4
Widowers (section 22 (9) Pension Act)	155
Total	165,506

In addition to the foregoing allowances are being paid to disability pensioners under section 26 of Pension Act, in respect of the following:—

Helplessness	305
Wear and tear of clothing (section 26 (3 and 4) Pension Act)	3,923

Dependent Pensioners

STATEMENT SHOWING THE NUMBER OF WIDOWS WITH PENSIONABLE CHILDREN AS AT MARCH 31, 1929

Number in family	Families	Total number of children
1	2,439	2,439
2	1,065	2,130
3	274	822
4	83	332
5	22	110
6	16	96
7	3	21
8	4	32
Total	3,906	5,982

Number of widows with pensionable children	3,906
Number of widows without pensionable children	3,931
Total	7,837
Percentage of widows with pensionable children	49·8
Percentage of widows without pensionable children	50·2

Dependent Children

Children only (widows also on pension)	5,982
Children only (pensioned in own right)	4,631
Children orphan (pensioned in own right)	678
Children only (with other dependent pensioners)	14
Total	11,305

STATEMENT SHOWING THE NUMBER OF PENSIONS DISCONTINUED OR CANCELLED AND REASONS THEREFOR, DURING THE FISCAL YEAR ENDING MARCH 31, 1929

	Number	Total
Disabilities		
Death	637	
Disappearance of disability	77	
Under Section 5—Pension Act (unclaimed)	70	
Imprisonment (section 17 Pension Act)	16	
Gratuities (disability less than 5%)	11	
Insanity	23	
Final payment by agreement	54	
Miscellaneous	6	
		894
Dependents		
Under Section 33 Pension Act	13	
Under Section 5—Pension Act (unclaimed)	3	
Widows re-married	62	
Mothers re-married	13	
Orphan child married	2	
On youngest child attaining age limit	214	
Pensioner died	370	
On brother or sister attaining age limit	4	
On orphan child attaining age limit	67	
Miscellaneous	8	
		756
		1,650

In addition to this total 70 widows' pensions were discontinued on remarriage and 4 widows' for misconduct in cases when pensions for children were continued.

Miscellaneous Statistics

STATEMENT SHOWING THE NUMBER OF DEATHS DURING THE FISCAL YEAR ENDING MARCH 31, 1929, OF PENSIONERS AND THOSE ON WHOSE BEHALF ALLOWANCES WERE BEING PAID

	Number	Total
Disabilities		
Pensioners died—		
Death related to service	347	
Death not related to service	282	
Death, relationship to service (not decided)	8	
Wives of pensioners died	221	
Children of pensioners died	296	
Other relatives receiving allowances died—mothers	37	
fathers	12	
		1,203
Dependents		
Widows	49	
Mothers	307	
Fathers	211	
Children	24	
Orphan children	1	
Brothers and sisters	1	
Other relatives	2	595
Grand total		1,798

Additional and other allowances discontinued during the fiscal year ending March 31, 1929, by reason of the children reaching the expiry age limit for children, viz., 16 for boys and 17 for girls—

Children of disability pensioners	2,248
Children in own right and children of dependent pensioners	1,821
Brothers and sisters and other relatives	7
Total	4,076

Disability Pensioners

STATEMENT SHOWING THE NUMBER OF PENSIONS DISCONTINUED BY FINAL PAYMENT BY AGREEMENT DURING THE FISCAL YEAR ENDING MARCH 31, 1929

	Number	Reduction in amount of yearly liability
By agreement	54	$ 4,845 00

Classification of allowances and number affected by such final payment.

By agreement	Total
Wives	15
Children	26
Total	41

Disability Pensioners

STATEMENT SHOWING THE NUMBER OF DISABILITY PENSIONS CANCELLED, CLASSIFICATION AND NUMBER OF ALLOWANCES AFFECTED THEREBY DURING THE FISCAL YEAR ENDING MARCH 31, 1929

—	Number of pensions	Number of allowances
Pensions	894	
Wives		538
Widowers allowance		4
Children		817
Fathers		2
Mothers		18
Parents (jointly)		2
Helplessness		13
Wear and tear of clothing		23
Total	894	1,417

NUMBER OF PENSIONS AFFECTED AND INCREASE IN ANNUAL LIABILITY, FOLLOWING AMENDMENTS TO DISABILITY TABLE DURING FISCAL YEAR ENDING MARCH 31, 1929

No.	Increased liability
2	$ 270 00

ALLOWANCES FOR WEAR AND TEAR OF CLOTHING AS PROVIDED BY 1925 AMENDMENT (SECTION 26) TO PENSION ACT, AND INCREASE IN ANNUAL LIABILITY

No.	Increased liability
154	$ 7,719 00

NUMBER OF PENSIONERS RECEIVING TREATMENT UNDER THE DEPARTMENT OF PENSIONS AND NATIONAL HEALTH AS AT MARCH 31, 1929

—	Number	Total
Pensioners	1,512	
Final payments	176	
Gratuities—first awards	34	
Discontinued with gratuity	42	
Discontinued—disappearance of disability	19	
Discontinued—classified insane	297	
		2,080

Number of medical examinations for pension purposes carried out during the fiscal year ending March 31, 1929 26,881

CHANGES, REINSTATEMENTS AND DISCONTINUATIONS FOLLOWING REVIEW UNDER SECTION 33 OF THE PENSION ACT, FOR THE FISCAL YEAR ENDING MARCH 31, 1929

Relationship to soldier	Number of reinstatements	Number discontinued	Number of changes	Totals
Mothers	9	4	150	163
Fathers	2	4	33	39
Parents	6	4	60	70
Others	1	1	.....	2
Totals	18	13	243	274

DEPENDENTS

Number of dependent pensioners awarded increase by addition of other allowances—	
Mothers	8
Parents (jointly)	4
Sister or brother	1
Number of reinstatements of remarried widows' pensions (under section 40-2 of the Pension Act, 1924 amendment)—	
(a) Previously no pension in force	2
(b) Pension in force to dependents other than widows	2
Number of widows' pensions discontinued for misconduct, Section 39, Pension Act—	
(a) When pension is continued on behalf of children or other dependents	4
Number of widows' pensions reinstated after being discontinued for misconduct, Section 39, Pension Act—	
(a) Where pension is in force to dependent children or other dependents	4
(b) Where pension has been previously discontinued	2
Number of children of dependent pensioners or dependent children awarded increase or decrease in pension rate	77
Number of dependent pensioners with allowances for children added	8
Number of dependent children or children of dependent pensioners continued after attaining age limit	251
Number of dependent pensions—basis of award changed	11
Number of children of dependent pensioners cancelled for reasons other than death or age expiry	6
Number of dependent pensioners' children reinstated previously cancelled for reasons other than death or age expiry	2
Number of deceased widows pensions continued to daughter (section 22-10 Pension Act, 1928 amendments)	2
Number of dependent pensions awarded to widows—1928 amendments, section 32-1a	23
32-1b	67
Number of awards made by Governor General in Council on recommendation of Special Tribunal under Section 21, Pension Act (Meritorious Clause)	5

DISABILITY

Number of disability pensions increased	4,450
Number of disability pensions decreased	563
Number of disability pensions continued at same rate	11,849
Number of disability pensions made permanent on award and by medical review	2,021
Number of permanent disability pensions changed to temporary on medical review	267
Number of children of disability pensioners added	6,403
Number of disability pensioners with allowances for wife cancelled for reasons other than death	125
Number of children of disability pensioners cancelled for reasons other than death or age expiry	69
Number of disability pensioners awarded increase by addition of other allowances—	
Mothers	202
Fathers	57
Parents jointly	25
Helplessness	31
(Section 22 (9) Pension Act)	65
(Section 26 (3 and 4) Pension Act)	164
Number of disability pensioners awarded increase in helplessness allowance	11
Number of helplessness allowances discontinued	9
Number of allowances for wear and tear of clothing cancelled	1
Number of disability pensioners additional allowances discontinued for reasons other than death or marriage—	
Widowers (section 22 (9) Pension Act)	20
Mothers	28
Fathers	3
Parents (jointly)	1
Number of pensions for children of disability pensioners continued after age limit	83
Number of disability pensions reduced 50 per cent for unreasonable refusal of treatment (section 28, Pension Act)	1
Number of disability pensions increased to full pension after acceptance of treatment	10
Number of disability pensions increased to full pension (section 28-1 Pension Act, 1928 amendments)	12
Number of disability pensions—basis of award changed	937
Number of disability pensioner's allowances reinstated—previously cancelled for reasons other than death or age expiry, including those not previously reinstated with pensioner—	

DISABILITY—*Concluded*

Wives	775
Children	1,284

DEPENDENTS

BONUS TO CHILDREN OF DECEASED PENSIONERS UNDER SECTION 22-8 PENSION ACT DURING THE FISCAL YEAR ENDING MARCH 31, 1929

Number of children	218	Amount of bonus	$ 10,589 00

One month's pension to dependents on death of a disability pensioner with 50 to 100 per cent disability, as provided by section 38—Pension Act (1924 amendment).

Relationship of number affected		Amount
Widows	221	
Children	346	
Total	567	$ 17,790 00

MARRIAGES DURING THE FISCAL YEAR ENDING MARCH 31, 1929

Disability pensioners (allowance for wife granted)	2,270
Widows remarried—pensions for children continued	70
Widows remarried—with no pensionable children	62
Mothers remarried	14
Children	22
Total	2,438

THE FEDERAL APPEAL BOARD, CANADA

OTTAWA, December 31, 1929.

Hon. J. H. KING, M.D., M.P.,
Minister of Pensions and National Health,
Ottawa, Ont.

SIR,—Pursuant to the provisions of Section 50 (11) Chapter 157, Revised Statutes of Canada, I have the honour to submit herewith a report of the work of the Federal Appeal Board for the period, August 17, 1923, to March 31, 1929.

As reports previously made by the board have not been printed for general distribution, it has been felt desirable to cover in this report the whole period of the work of the Board since its appointment in August, 1923.

During this period 16,065 appeals were entered including second appeals and applications under section 21 of the Pension Act (the so-called Meritorious Clause). In addition, 1,094 Imperial appeals were received.

Of the total number of appeals received in the period under review, 11,985 have been dealt with. Of these, 3,863 were ruled upon by the Board in Ottawa from the record as being outside its statutory jurisdiction, while 6,647 have been formally heard of which 1,410 were allowed, 4,571 disallowed and 666 comprise outstanding judgments, appeals adjusted after hearing without issue of judgment and adjourned cases. The percentage of allowed appeals was 23·5. In addition 1,139 claims were re-opened and adjusted by the Board of Pension Commissioners for Canada after an appeal had been taken to the Federal Appeal Board, and 336 applications were dealt with under the Meritorious Clause.

There remain to be heard 2,610 appeals which are ready for hearing subject, in a majority of cases, to necessary preparatory work by the official soldiers' advisers. In addition, there are 889 appeals in which official soldiers' advisers are definitely not ready to proceed, as they consider it necessary, in the interests of the appellants to obtain further supporting evidence. There are also 581 cases where further information is required before they can be classified.

Turning from the period covered by the enclosed report it may be added that since the end of the fiscal year the volume of appeals being entered as well as being heard has continued to increase. On December 31, 1929, there were 3,245 appeals awaiting hearing, while during the year the Board heard 2,552 appeals, 642 more than were heard during the preceding twelve months.

Information in detail as to the board's activities will be found in the report and the statistical statements attached to it.

Your obedient servant,

C. B. TOPP,
Secretary.

97277—5

LEGISLATION

Legislation enacted at the 1923 session of Parliament provided for the establishment of the Federal Appeal Board. The Board was appointed by the Governor in Council on August 17, 1923, on the recommendation of the Honourable the Minister of Justice. The appointments have since been extended from time to time in accordance with the needs of the work.

The function of the board and the more important parts of the legislation under which it was established are set out in the following sections of the Pension Act, chapter 157, R.S.C. 1927, as amended by chapter 38 of the Statutes of 1928:—

SECTION 50 (1)

There shall be a board known as "The Federal Appeal Board," consisting of not less than three or more than seven members appointed by the Governor in Council on the recommendation of the Minister of Justice.

SECTION 51

Upon the evidence and record upon which the Commission gave its decision an appeal shall lie in respect of any refusal of pension by the Commission on the ground that the injury or disease or aggravation thereof resulting in disability or death was not attributable to or was not incurred during military service.

SECTION 51 (4)

Any person desiring to appeal from a decision of the Commission may do so by notice thereof in writing delivered to the department or to the board on or before the thirty-first day of December, A.D. 1928, or within two years from the date of the decision complained of.

SECTION 51 (5)

The decision of the board on such appeal shall be final and shall be binding upon the applicant and upon the commission, provided that if before the thirty-first day of December, A.D. 1928, or within one year from the date of the decision of the board upholding a refusal of pension by the commission the applicant submits newly discovered evidence which, in the opinion of the commission, raises a reasonable doubt of the correctness of the decision, the commission shall reconsider the case and if pension is again refused the applicant shall have the right of a second appeal to the board whose decision on such second appeal shall be final and shall be binding upon the applicant and upon the commission.

SECTION 51 (6)

Every applicant and the Commission or its representative shall have the right to attend in person, at any and all sittings for the purpose of hearing an appeal held by the board or by a member thereof, under such conditions as to the payment of an applicant's expenses thereby incurred as may be fixed by regulation of the Governor in Council, and the applicant may if he so desires, but at his own expense, be assisted thereat, by counsel or representative other than the official soldier adviser appointed by the department.

ORGANIZATION OF BOARD

Immediately following its appointment the board opened offices in the Elgin building, Ottawa, and the work of hearing appeals was proceeded with as soon as the necessary organization work could be completed. The first appeal was argued before the board in Ottawa on October 9, 1923. Since that time sessions have been held in centres throughout the country from Charlottetown, P.E.I., to Victoria, B.C. In general the board has endeavoured to function as an authority through which grievances, whether well founded or not, can be voiced and finally settled in a public yet orderly manner. No attempt has been made to restrict those whose grievances may not be well founded

from placing their claims before the board. It is considered that this policy not only engenders respect for the law but avoids the possibility of criticism through an appearance of discrimination.

There has been a disposition on the part of individual appellants to accept the finality of the board's decision without complaint.

A strict policy of disposing of appeals in the presence of the appellant in his own locality whenever possible has been followed and consequently the commissioners have necessarily been on the road almost continuously. For example, in the past twelve months the board has travelled 31,999 miles in the course of its duties, or a total of 127,998 miles if the aggregate of travel by each member is considered. Sessions are held in some 54 centres. In addition to the formal sittings the board has visited hospitals, sanatoria, etc., to give appellants unable to attend the sessions by reason of illness an opportunity to state their claims. It has also held numerous informal sessions in Ottawa for dealing with appeals in which the appellant wished a decision without appearing in person or by representative and for dealing with applications under the meritorious clause.

APPEALS PENDING

As no independent appeal tribunal had been constituted in Canada prior to the appointment of the Federal Appeal Board the board took office with a considerable accumulation of work ahead of it notwithstanding the fact that its jurisdiction was limited by the statute to appeals upon the question of entitlement. This accumulation of appeals was gradually reduced, but recent amendments to the legislation, notably removal of the time limit for application for pension, resulted in a large increase in the number of appeals entered. For example, on March 31, 1928, there were 1,317 appeals awaiting hearing whereas on March 31, 1929, there were 2,579 appeals awaiting hearing not including 889 in which the official soldiers' adviser was not ready to proceed.

More than half the appeals ready and awaiting hearing are those of ex-members of the forces and their dependents resident in the province of Ontario. These with appeals pending in the provinces of Quebec and Manitoba comprise the bulk of the work awaiting attention.

Of the appeals pending in Quebec and Manitoba 816 are cases in which the official soldiers' adviser is not ready to proceed. The board is advised that in all probability a large number of these will be adjusted without a hearing, so that the principal problem facing the board in this connection is that presented by work in Ontario.

The board is confident that it can cope with this situation, which is felt to be a temporary one due very largely to amendments to the Act which have been mentioned. Arrangements have been made for disposal of the more urgent applications first.

HEARINGS BEFORE ONE MEMBER

Under present procedure appeals are heard by a quorum of the board (three members). Provision was made in the Act, and the original intention was that the members should sit individually in different centres, thus disposing of accumulated appeals with as little delay as possible, though provision was also made for an appeal to a quorum from the decision of one member.

It developed within a very short time, however, that the policy of bringing appeals before one member of the board instead of resulting in prompt settlement, as was hoped, in fact resulted in further delay, the board's experience being that in about 85 per cent of the cases heard by one commissioner an appeal to a quorum was entered, if not by the soldier then by the Board of Pension Commissioners or the Department of Soldiers' Civil Re-establishment. This gave rise not only to delay and expense but also to difficulty in arranging quorum sessions by reason of the provision that the member hearing the appeal individually may not sit on the quorum disposing of the further appeal.

After giving the system of individual hearings a thorough trial extending over a period of several months the board recommended that it would be in the interests of all concerned to have all appeals dealt with by a quorum, individual hearings being eliminated. The Governor in Council approved this change and necessary provision was made to enable the board to send out two quorums of three members each.

SECOND APPEALS

Under the original legislation it was provided that the judgment of the Federal Appeal Board would be final after one appeal. It subsequently developed in a number of instances that, after disallowance of the appeal new evidence of an important character became available.

To meet this situation provision was made for reopening such cases by the B.P.C. with right of a second appeal to the F.A.B. chapter 157 (section 51-5 R.S.C. 1927). Up to March 31, 1929, 359 second appeals had been entered under this provision, of these 154 have been heard of which 38 have been allowed and 109 disallowed, while seven are pending judgment.

MERITORIOUS CLAUSE

During the session of 1923 a clause was inserted in the Pension Act with the object of empowering the Board of Pension Commissioners and the Federal Appeal Board acting jointly to recommend to the Governor in Council the award of compassionate pension or allowance in certain cases regarded as being specially meritorious. The intention was that the clause should cover certain special cases which could perhaps not be foreseen, or for which it would not be expedient to legislate as a class, but which from compassionate motives or otherwise it would be considered not inconsistent with the public interest and especially just, so far as the private interest is concerned, to make an award.

This clause as originally enacted was found to be inoperative and has been amended from time to time. It now comprises section 21 of the Pensions Act and provides that applications shall be considered by a special tribunal consisting of two members of the Board of Pension Commissioners and two members of the Federal Appeal Board, with the further proviso that if the tribunal is equally divided upon any application a judge of the Exchequer Court shall join it, the decision of the majority being final.

A total of 367 applications have been submitted under this clause. In a majority of the applications the claims have been based upon purely economic difficulties having no connection with service and these have been regarded as being outside the intention of this section.

JURISDICTION QUESTIONED

Since the Federal Appeal Board began its work, it has handed down several judgments in favour of appellants to which effect has not been given by the Board of Pension Commissioners for Canada on the ground that the Appeal Board was without jurisdiction in the cases concerned. In some of these cases the commission has reconsidered its decision as the result of an expression of opinion by the Department of Justice and has carried out the Judgments. The six remaining cases are being made the subject of a reference to the Exchequer Court of Canada.

IMPERIAL APPEALS

In addition to its work in dealing with appeals of former members of the C.E.F., the Federal Appeal Board has been authorized to examine Imperial appellants on behalf of the Imperial Pensions Appeal Tribunal, thus not only rendering material assistance to the Imperial authorities but also reducing the cost of its work on Canadian appeals.

The British War Pensions Act provides that certain classes of disability pensions may be made the subject of a final award, the amount of such award being based upon the degree and probable duration of the disability in each case. This award is made by the Ministry of Pensions, provision being made for an appeal against the final award to the Pensions Appeal Tribunal which operates as an entirely independent authority under the Lord Chancellor. The appellant is required to present himself for medical examination, his transportation and travelling expenses being a charge against the public. The appeal can therefore be dealt with only in the presence of the appellant.

As hundreds of Imperial pensioners whose cases were made the subject of final awards and who appealed against these awards are residents in Canada, the problem of disposing of their appeals presented many difficulties. To meet this situation an arrangement was made with the Federal Appeal Board. The function of the board in Imperial cases consists in carrying out a medical examination, receiving the men's evidence and forwarding a recommendation to the Pensions Appeal Tribunal in England. The decision on the appeal is given by the Pensions Appeal Tribunal and is communicated to the appellant from England by the Tribunal. Up to March 31, 1929, the board had examined and forwarded recommendations in 933 Imperial cases.

This work does not interfere with disposal of Canadian appeals by reason of the fact that the few Imperial cases pending can easily be taken up in addition to the usual day's list of Canadian appeals, the principal part of the Imperial work being the medical examination.

OFFICIAL SOLDIERS' ADVISERS

In setting up the machinery for appeals provision was made for the appointment of official soldiers' advisers whose duties would be "generally to advise and assist ex-members of the forces in matters pertaining to re-establishment, treatment and pension and to perform such other duties as may be prescribed." Thirteen official soldiers' advisers were appointed. One of the principal duties of the official soldiers' adviser is to act as the appellant's counsel when the case is presented before the Appeal Board and their work has been most helpful.

EXPENDITURE

The amount voted by Parliament annually for the work of the board is $130,000. Details of the board's expenditure appear in the report of the Department of Pensions and National Health, as the vote covering the board's work stands in the name of that department and accounts are kept by it. Of this sum $45,698.93 is not controllable by the Federal Appeal Board as it represents the salaries and expenses of official soldiers' advisers who are not members of the staff of the board and are not under its jurisdiction.

Following are statistical statements covering the work of the Board:—

PROGRESS REPORT, TO MARCH 31, 1929

—	Halifax	Saint John	Charlottetown	Quebec	Montreal	Ottawa	Toronto	London	Winnipeg	Regina	Calgary	Vancouver	Victoria	Totals
Appeals awaiting further information	32	20	2	50	137	106	94	48	794	33	45	36	73	1,470
Outside jurisdiction	156	124	10	77	953	456	433	164	809	109	185	235	152	3,863
Reopened by B.P.C. since appeal entered and allowed	71	30	7	16	156	165	264	94	150	37	71	51	27	1,139
Appeals awaiting hearing	111	80	6	.....	290	210	801	112	115	224	259	189	58	2,455
Set for hearing	.....	.....	.....	.....	.....	41	.....	.....	83	.....	.....	.....	.....	124
Heard, judgment outstanding	18	1	4	6	74	37	184	121	4	1	2	2	.....	454
Heard, adjourned	8	10	.....	2	8	11	19	2	6	2	5	1	3	77
Appeals heard, completed	496	227	82	104	467	953	1,325	415	482	360	487	490	228	6,116
Meritorious, in preparation	.....	1	.....	.....	1	11	5	.....	1	.....	2	.....	1	22
Meritorious, ready for consideration	1	.....	1	.....	.....	3	1	.....	3	.....	.....	.....	.....	9
Meritorious, heard (by each board)	14	3	5	5	17	45	57	24	23	15	36	16	12	272
Meritorious, heard (by special tribunal)	5	5	2	1	1	7	22	4	3	1	7	4	2	64
Totals	912	501	119	261	2,104	2,045	3,205	984	2,473	782	1,099	1,024	556	16,065

IMPERIALS

Appeals heard	22	5	1	7	78	39	391	106	85	57	79	136	48	1,054
Appeals set for hearing	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	2
Appeals awaiting hearing	.....	1	.....	.....	1	.....	5	3	.....	3	12	13	.....	38
Totals	22	6	1	7	79	39	396	109	87	60	91	149	48	1,094

NOTE.—The above Imperial Record does not include withdrawn appeals or miscellaneous enquiries, or appeals, where the appellant's address is unknown.

GENERAL STATISTICS, AS AT MARCH 31, 1929

Total Appeals received		16,065
Distribution—		
Awaiting further information—		
New cases	144	
Cases under correspondence	197	
Appellants' addresses unknown	240	
		581
Cases outside jurisdiction of Board—		
Assessment claims	1,762	
Dependants' claims	166	
Marriage after app. of disability	34	
Improper conduct	288	
Statute barred	17	
*Miscellaneous	1,596	
		3,863
Re-opened by B.P.C. before hearing	1,139	
		1,139
Awaiting hearing—		
O.S.A's not ready to proceed	889	
Ready for hearing	2,455	
Set for hearing	124	
		3,468
Awaiting judgments—		
Ordinary cases	454	
Adjourned cases	77	
		531
Settled by a quorum—		
Allowed	1,227	
Disallowed	4,211	
Ruled no jurisdiction	17	
Withdrawn before judgment	3	
Re-opened by B.P.C. before judgment	83	
		5,541
Settled by one Commissioner—		
Allowed	43	
Disallowed	69	
Ruled no jurisdiction	15	
Re-opened by B.P.C. before judgment	17	
		144
Settled by a quorum on re-appeal—		
Allowed—1 Comm. confirmed	67	
Allowed—1 Comm. reversed	73	
Disallowed—1 Comm. confirmed	270	
Disallowed—1 Comm. reversed	19	
Judgment of quorum outstanding	2	
		431
Meritorious claims—		
Awaiting hearing	31	
Settled (23 awards)	336	
		367
		16,065

*"Miscellaneous" cases outside jurisdiction of Board include 1,419 appeals where there had been no decision of the B.P.C. A proportion of these will subsequently become appealable claims.

NATIONAL HEALTH DIVISION

FOOD AND DRUGS DIVISION

The main task of the division is the administration of the Food and Drugs Act, now chapter 76, Revised Statutes of 1927. The original legislation of 1920, planned essentially for the protection of the purchasing consumer, was amended in 1927 in such a way that its usefulness has been greatly increased. It is not to be regarded as entirely punitive legislation as it is only quasi-criminal in character, but it serves as a guide for the industries preparing food and drugs for the market. Where adulteration or misbranding is wilful and persistent, the penalties of the Act must be applied. The preventive effect of such legislation is by no means easily estimated, because without this restraining force the adulteration of foods and drugs would soon become very widespread. The enormous increase in the number of manufactured foods and expansion of market in packaged foods have necessitated broadening the inspection of labels to prevent misbranding in all its phases.

Special importance is attached to the inspection of import shipments under the authority of section 10. In this way a great deal of good is done in keeping from the Canadian market adulterated and misbranded products coming from other countries. It has been found much more satisfactory to refuse entry than to attempt to apply the Act after the goods have been distributed.

To carry out this work, combined inspection and laboratory services are maintained. Twenty-six inspectors are located at the larger centres in Canada with provision for giving attention to surrounding territory. The main laboratories are in Ottawa, with branches located at Halifax, Montreal, Toronto, Winnipeg and Vancouver.

In addition to these, the division provides analytical services for the Narcotic Division and also collaborates with other departments of the Government in conducting such analyses as may be required in the best interests of the entire service. The following table summarizes the laboratory work carried on at the various centres:—

SAMPLES EXAMINED IN THE FOOD AND DRUG LABORATORIES

Nature of samples	Laboratories					
	Ottawa	Montreal	Vancouver	Winnipeg	Halifax	Toronto
From Inspectors of Food and Drugs	1,301	1,233	2,731	1,793	1,355	1,563
Department of Agriculture	288	513	459	240	14	60
Royal Canadian Mounted Police (Narcotics)	85	50	150	129	1	25
Other departments of Government	507	.....	165	52	48	5
Miscellaneous	17	70	11	13	.....	1
Total	2,198	1,866	3,516	2,227	1,418	1,654
Grand total						12,879

The majority of samples submitted by the Department of Agriculture consisted of butter and cheese collected in the administration of the Dairy Industries Act; from the Department of National Revenue there were samples of

beer, distilled liquors, wine, narcotic drugs, vinegar and medicines; and from the Royal Canadian Mounted Police samples of narcotics, liquor and Sterno Canned Heat.

FOODS

Baking Powder, and Baking Powder Materials.—Of one hundred samples examined fourteen were found to be adulterated or misbranded. It is not to be concluded from this statement, that 14 per cent of all the baking powders sold in Canada is adulterated, as these samples were taken from suspected stocks. This is a product which is subject to deterioration in storage and it is not infrequently found that the package of baking powder undoubtedly adulterated because of failure to evolve an effective amount of gas, has been with the dealer for two years or more. Such deteriorated stocks are disposed of by destruction. Numerous shipments of baking powder materials have been examined for content of arsenic in order to obtain assurance that the finished product may be within the limits provided in the regulations. Numerous mislabellings have been corrected, the complaints arising from failure to give the proper name of the manufacturer, statement of net contents on package, or employment of a descriptive name not consistent with the composition of the materials used in manufacture. For example, a so-called "tartrate" powder should not contain acid phosphates or aluminium sulphate. Exaggerated claims for special added ingredients such as pepsin, constitute misbranding, for digestive enzymes impart no merit to these products.

Thirty samples of cream of tartar were examined in the year Import shipments were found to meet the requirements with respect to arsenic content. It was found, however, that one market sample contained sulphate and since the actual content of potassium bitartrate was only 94 per cent, it could not correctly be labelled "Pure."

Beans.—The one hundred and ninety-four samples examined in the course of the year represented import shipments. Special attention has been paid to this item in order to prevent the entry of Burma or Rangoon beans, capable of developing hydrocyanic acid in quantities dangerous to health. Unless such beans are very carefully prepared by washing, soaking and repeated boilings with discard of cooking waters, they are a menace to health. Experiences in Canada established years ago the fact that hydrocyanic beans could cause serious illness. As it is impossible to instruct all cooks, the only safe procedure is to keep such beans off the market. Two shipments comprising several thousand bags were held on this account.

Beverages.—A general survey of the entire market in soft drinks revealed the necessity for further examination of the trade in these products. Three hundred and forty-five samples were collected and of these one hundred and four were found to be adulterated or misbranded. Misbranding consisted mainly in failure to place upon the label information to which the purchaser was entitled, and adjustments were secured in all cases. From the standpoint of adulteration, the main feature was in connection with saccharin, the use of which in beverages for general use is prohibited by the regulations. Apart from the inspection of numerous labels from the standpoint of enforcement of the regulations and maintenance of the protection of the purchasing consumer against false, exaggerated and misleading statements, the outstanding work on beverages during the year was in connection with the elimination of saccharin from numerous soft drinks. Not only is saccharin much cheaper than sugar, but it is not a desirable constituent of these products from the standpoint of health. Saccharin should be regarded as a drug and its legitimate use is limited to that by diabetics. Saccharin has absolutely no food value. Some manufacturers persisted in the use of saccharin, for which it was necessary to institute four prosecutions, all of which were brought to a successful issue.

A rather unusual case arose from the sale of a beverage in a paraffin novelty container, sold as a combined drink and gum. Complaints were received, in effect, that children had been made ill by eating the paraffin wax, possibly thinking that it was candy. Import shipments were refused entry and one manufacturer voluntarily discontinued operations when the facts were brought to his attention. Another persisted and it was necessary to take legal action to secure compliance. The court registered a conviction, imposing a penalty consisting of fines and costs. The remaining stock was destroyed.

Dairy Products.—In the course of the year one thousand three hundred and seven samples of *butter* were examined for the purposes of the Dairy Industries Act. Special attention was paid to water content, foreign fats and preservatives. There is decidedly a tendency in the trade to incorporate during the process of manufacture more water than the sixteen per cent permitted in the regulations. Adulteration from the admixture of cocoanut oil has not yet completely disappeared, although this form of adulteration appears to be waning. Import shipments from New Zealand, Australia and the Fiji Islands were examined for boric acid but none was found in any consignment.

The results obtained in the analysis of forty-three samples of *cheese* indicate that there is no difficulty in meeting the established standard for fat content. Special attention was paid to the labelling of packaged cheese made by the newer processes.

Of one hundred and ten samples of ice-cream examined only two were found to be substandard. Manufacturers generally are avoiding the complication of previous years by not attempting to standardize too closely to the minimum fat requirement of ten per cent. A number of small operators listed in last year's records of adulteration have discontinued manufacturing. In general, the quality of this important food as sold in Canada is to be regarded as highly satisfactory.

Biscuits.—Fancy biscuits were examined particularly from the standpoint of the dyes used in manufacture and also the labelling with respect to statement of net contents of packages, manufacturers name and address, etc. Of forty-five samples examined three were found to be misbranded. No prohibited dyes were found. The cases of misbranding were adjusted without resorting to prosecution.

Confectionery.—Numerous import shipments of confectionery were examined for the presence of non-permitted coal-tar dyes. Eleven such shipments were refused entry and returned to the country of origin. In all, two hundred and twenty-six samples were examined. It is believed that as a result of these activities Canadian manufacturers have discontinued the use of non-permitted dyes.

Cocoa and Chocolate Products.—Adulteration was detected in five samples of 161 submitted for analysis. The recent tendency in processing is to lower the food value of the cocoa powder by a more thorough extraction of the fat. In conjunction with this there is an increasing tendency towards the incorporation of larger proportions of shells. One large shipment was refused entry because it contained a very considerable proportion of iron oxide. These tendencies indicate the need for specific standards for cocoa products, but the question of added iron oxide and starch can be dealt with in cases now pending, by applying the general terms of the Act.

Cocoa Butter.—Thirty-eight samples were examined and found to be of satisfactory quality with the exception of one import shipment that was held for proper labelling, it being a substitute.

Canned Goods (Meat, Fish, Vegetables, Fruit, etc.)—Of one hundred and sixty-nine samples examined, including one hundred and forty-seven samples

of fish and fish products, all but a very few were of satisfactory quality. It was necessary to institute prosecution to secure correction in one instance of misbranding. Another misbranded shipment was deflected from Canada. A consignment consisting of forty cases of imported fish balls was found to be adulterated because the contents in the cans were undergoing putrefaction. Disposal was made by destruction. Two other seizures of canned fish conserve and salt herrings were likewise disposed of. Special effort has been made to see that manufacturers of these products do not use chemical preservatives or colour.

Cereal Foods.—Misbranding of special cereal foods has been detected in several instances. Manufacturers of these products are inclined to take advantage of immature research reports on subjects such as vitamins and no doubt create or encourage misconceptions in the minds of faddists who appear to be looking for a single food that will be all-sufficient for maintainence of health. No such food has been found definitely injurious to health, but many instances have been reported in which the purchaser obtains very poor value for his money. It is, therefore, desirable that this situation be not aggravated by over-exploitation and the making of any extravagant claim that cannot be substantiated is properly regarded as constituting misbranding.

Figs.—It is to be noted from the examination of 336 samples of figs taken from import shipments that the general quality of this fruit shows an improvement over that of previous years. Figs are particularly susceptible to insect infestation and mould growths. A few years ago it was necessary to recognize the possibility of thirty-five per cent of defective fruit in any shipment, but now, as a result of critical inspection by consuming countries, conditions at the sources of production and packing have so improved, that at the present time a reasonable tolerance for defective fruit is placed at ten to fifteen per cent. In the course of the year eleven shipments were refused entry, one of these showing eighty-four per cent of wormy fruit, which was destroyed. Another shipment, only slightly defective, was reconditioned and the others returned to country of origin. It is to be noted, however, that two of the refused shipments were merely trial shipments consigned to Canada as a result of rejection at the customs port of another country. If the shippers had been successful in entering these two lots, three entire shiploads would have followed. The preventive effect of this inspection is, therefore, evident.

Flavouring Extracts.—Ten instances of adulteration or misbranding were detected in the analysis of 192 samples submitted. One stock of substandard lemon extract was withdrawn from the market. Objection was also taken to the use of mineral oil, however refined, which might be used for solvent purposes. Such paraffin products have no food value and the principle involved in their use as solvents in the flavouring extract industry is very far-reaching, indeed. Special effort has been made to insure proper labelling of artificial and imitation flavours. Investigation of the labels used in the entire industry in Canada will be made with a view to making investigation as thorough and as complete as possible.

Coffee.—It is gratifying to note that samples of coffee, some of which were under suspicion, were all found to be genuine. Special coffees which are claimed to be decaffeinated to the extent that 95 per cent of the original caffein has been removed, have been found to meet the label claims. Another decaffeinating process was also investigated but it was found that the device did not materially change the alkaloidal effect of the coffee as the caffein contained in the natural product was merely citrated. Claims made for the product as a tonic food beverage "inducive to rest, natural sleep, a perfect nerve food" were, therefore, regarded as exaggerated.

Oils (Olive, Cocoanut, Cottonseed, Soy Bean).—Nine instances of adulteration and misbranding were detected in the examination of 240 samples. In one instance it was found that cottonseed oil was sold as olive oil. It was also found that in labelling salad oil certain manufacturers had neglected to name the oil employed. According to the regulations the name of the oil must appear upon the package in type of the same size as the print of the word "salad." Seven import shipments were detained and held until the label declaration of net content was correctly stated upon the packages. The general situation in this regard is greatly improved over that noted in previous years. The majority of packers in European countries are now aware of Canadian regulations and shippers from the United States are coming to observe the differences existing between the American and the Imperial measures.

Food Colours.—A general improvement is noted in the situation respecting food dyes. Nine adulterated samples were found in the 356 examined. Eight import shipments were refused entry because they did not meet the requirements of the regulations. Proposals to add certain green dyes to the approved list have not been regarded favourably. In July of this year the entire trade in the product was advised of the change made in the regulations February, 1928. In only one instance was it found necessary to exact legal penalty for the persistent attempt to market a non-permitted dye for food colouring. Scientific records show that the particular dye in question is not entirely harmless to health. Strict control of the situation is deemed necessary because of the extensive use of these dyes in colouring confectionery and beverages consumed very largely by children.

Honey.—Of sixty-four samples examined four were found to be misbranded, with failure to state net contents of packages or with false and exaggerated claims. All samples were found to be genuine and free from adulteration. Although honey is a wholesome food and possesses considerable nutritive value, it is not rich in vitamins and should not be exploited as of special merit as a food to be used by those who are anæmic or suffering from diabetes. One large stock was held until such exaggerated claims were removed from labels.

Gelatin.—The routine examination of gelatin was continued this year with the analysis of eighty-eight samples. One of the chief items of interest in this connection is the content of arsenic, lead and zinc, unavoidably present as incidental impurities. It may be necessary to elaborate the present standards by specifying a limit of tolerance for metallic impurities in this product.

Dried Fruits (Apples, Apricots, Dates, Currants, Raisins, Peaches and Pears).—Almost the entire total of 1,970 samples examined in the course of the year were taken from import shipments. Six samples of dates were found to be wormy and one shipment of raisins was refused entry for the same cause. Three shipments of dried apricots were refused because of excessive sulphite content. Three shipments of dried peaches were refused for the same reason. Results of the analysis of import shipments will be reviewed for the purpose of considering the advisability of placing further limitations on the use of sulphur in drying and dehydrating these fruits.

Fruit Juices and Syrups.—In the analysis of forty-six samples, four were found to be adulterated or misbranded. The chief difficulty arose from the use of dye or colouring without label declaration. Only in one instance was the amount of preservative in excess of that specified in the regulations.

Dried and Evaporated Milk, etc.—Sixteen samples examined were all found to be free from adulteration and misbranding. Recent developments in this industry have produced gratifying results from the standpoint of quality of these prepared milks.

Fresh Fruits (Apples, lemons, oranges, peaches, pears, grapefruit, pineapple and tamarinds).—Six hundred and fifty-two samples of fresh fruits were examined. Ten shipments of oranges and three shipments of peaches were refused entry because the fruit was defective, being partially decomposed by rot. The general quality of citrus fruits coming to Canada showed a great improvement over that of previous years. It is true that the damage from frost was less than in some seasons, but a more potent factor is found in the fact that rejections in previous years have had the wholesome effect of improving the quality of shipments consigned to Canada.

Meat and Meat Products (Sausage, Hamburg Steak, etc.).—A total of 522 samples of meat and meat products, of which 354 were of sausage, were examined during the year. Of these 131 were found to be adulterated. This comparatively high figure for adulteration arose from the fact that in certain districts manufacturers of sausage have persisted in the use of sodium sulphite as a preservative or "improver." In one area, thirty-three samples of forty-nine examined were found to contain sulphite. In another, sixty-two of one hundred and sixty samples were found to be defective from the same cause. It is held that chemical preservatives such as sodium sulphite should not be used in or upon meat products. The use of this preservative conceals inferiority in that meat in which putrefaction is well advanced is made brighter in colour and further multiplication of bacteria arrested. If sausage meat is handled properly there is no necessity for using chemical preservatives. Consumers should not be asked to eat embalmed meat or to have chemically "dosed" meat products offered for sale. In all, seventy-five prosecutions were instituted and brought to a successful issue.

Maple Products.—Thirty instances of adulteration were detected in the analysis of 348 samples. Nine prosecutions were completed during the year. In addition to penalties imposed by the court, there were also confiscations of seized material. Brown sugar cakes resembling maple sugar cakes in appearance were seized and taken from the market. The manufacturer has discontinued this line. Two peddlers with no fixed place of business have been penalized, and another is being prosecuted in a case now pending. These itinerants have been taking a very clever advantage of unsuspecting purchasers. In general, it may be said that the quality of maple products sold shows a tendency toward improvement.

Jelly Powders.—Misbranding was noted in four samples of sixty-one examined. A special effort was made to correct the slack fill in the trade, competition among packers having led to the introduction of cartons of dimensions much greater than required to carry the amount of material sold. In some instances there was evidence that the purchaser was misled by this device. An understanding has been reached whereby through the co-operation of manufacturers of cartons, this particular feature of the industry will be improved.

Mustard.—Sixty-one samples of mustard and mustard compounds were found to be properly labelled and free from adulteration. One shipment was detained because although labelled "mustard," was found to contain a considerable percentage of wheat starch. There is, however, a gratifying improvement in the quality and labelling of mustard and mustard compounds manufactured in Canada.

Olives.—In the examination of twenty-nine samples, seven were found to be adulterated or misbranded. A shipment consisting of seventeen barrels of black olives were refused entry at customs and returned to country of origin, the grounds for the detention being an excess of wormy and decayed fruit. Another shipment of twenty-five boxes was held for relabelling as it was necessary that the statement of net contents be made in terms of Imperial measure.

Pepper.—Adulteration was detected in thirteen of two hundred and seventy-seven samples examined. Entry was refused to shipments of pepper shells and pepper siftings improperly marked. One large shipment of ground pepper was refused entry because it contained a large excess of mineral matter. It was found necessary to institute three prosecutions. Several large seizures amounting to four and one-half barrels and 1,315 pounds in other packages were confiscated and disposed of by donation to charitable institutions, the adulteration in this case being harmless to health. The article contained a small percentage of rice flour. There were also two cases arising from the admixture of pepper shells.

Spices (other than pepper).—Of spices other than pepper, 531 samples were examined and only seven were found to be adulterated or misbranded. Three shipments of whole nutmegs containing a high percentage of wormy, mouldy and insect-infested stock were returned to the country of origin.

Salad Dressing, Prepared Mustard and Sandwich Spread.—Of 104 samples examined thirty were found to be adulterated or misbranded. Defects in the label declaration of ingredients were the cause of the greater part of the misbranding. It is believed that as a result of corrective measures the marketing of these products is now on a more satisfactory basis, as there is general conformity to the regulations.

Jams, Jellies, Etc.—The results obtained in the analyses of fifty-three samples demonstrate very clearly the need for more stringent regulations covering these products. The misuse of pectin along with undeclared colouring matter is believed to be responsible for the general degradation in quality noted.

Mince-Meat.—Fifteen samples of mincemeat were examined, primarily from the standpoint of detecting the presence of carrots. The established standard for mincemeat is deemed to be sufficiently broad without extension to permit the use of carrots or some other vegetable.

Vinegar.—Of fifty-four samples of vinegar examined only two were found to be adulterated or misbranded. This establishes a record for vinegar in so far as the Canadian market is concerned. It was not uncommon, a few years ago, to find 60 per cent of samples of malt and cider vinegar adulterated. The improved condition of affairs is no doubt due to the observance of the regulations prohibiting the use of caramel in colouring spirit vinegar.

Wines and Other Alcoholic Beverages.—Thirty-five instances of misbranding were detected in 175 samples. It was found that many of the Canadian wines were not labelled according to the requirements of the Act and regulations. It is expected that the industry will respond to warnings given and that future collections will show improvement.

In addition to the above, samples were also examined of flour, invalid foods, icing sugars, lard, molasses, mustard, peanut butter, pickles, puddings, rice, sauces, seasoning, sugar, table syrups, tomato paste and tomato puree, etc.

DRUGS

Numerous samples of pharmacopoeial and other standard preparations were examined during the year. A few items have been selected for special comment.

Ammonium Carbonate.—An investigation of the stability of this salt in the solid state and in solution revealed that the latter is comparatively permanent while the former is susceptible of considerable deterioration under dispensary conditions of storage.

Aromatic Spirit of Ammonia.—This household remedy continues to be sold under strength in many cases. Only about 25 per cent of the samples examined were in any way satisfactory, some falling as low as 55 per cent of what is

required. The preparation undoubtedly loses free ammonia if not well stored, but the figures lead one to the conclusion that, in all probability, inferior ammonium carbonate was used in the first instance.

Belladonna Preparations.—The published survey to which allusion was made in last year's report has been followed up with rather encouraging results. Sixty per cent of the samples examined during the past year complied with official specifications as compared with 21 per cent discussed in the above report. The sample included fluid extract of leaf and of root, tincture and plaster.

Camphorated Oil.—This old-time remedy is now keeping within more reasonable limits. Only three sample swere found deficient in camphor, the greatest shortage being one-eighth. The use of cottonseed oil as a solvent seems to be general, but vendors need reminding that a product made with cottonseed oil must not be labelled simply "camphorated oil."

Cinchona Bark and Preparations.—An extensive survey of this drug and its preparations as used and sold in Canada has been undertaken during the period under review. Analysis of the crude drug has revealed very clearly that the responsibility for inferior preparations lies squarely upon the shoulders of manufacturers. In anticipation of the appearance of a special bulletin upon this subject, one may mention that the investigation disclosed grave shortcomings in the strength and uniformity of these galenicals.

Crude Drugs.—It has been thought wise to institute an examination of crude drugs at the ports of entry. So many pharmaceutical manufacturers have not the facilities for making complete analyses of drugs and are not only working in the dark but are thereby quite unwittingly selling substandard products. Again, small purchases in many instances render such analyses very costly. This policy has recently been adopted in Montreal and during the period under review, 132 parcels have been examined, including consignments of belladonna, cascara, cinchona, cochineal, digitalis, ergot, benzoin, myrrh, aloes, ipecacuanha, stramonium and other well known drugs with beneficent results. Shipments of myrrh and of benzoin have been returned to the country of origin.

Elixir of Triple Bromide.—This popular sedative is regarded more or less as a specialty of pharmaceutical houses with the result that some lack of uniformity exists throughout the trade. A measure of agreement is noticeable in respect of potency and a commendable adherence to the published formulæ, but the great variations in colour from a port wine red to an orange yellow, together with a wide assortment of predominating flavours, including cassia, lime, orange and fennel, must be fertile sources of anxiety to nervous patients.

Ether for Anaesthesia.—The quality of this article has given cause for much concern during recent years. Its natural instability is being appreciated more and more with the result that greater pains are being taken in its manufacture as well as in means to ensure its permanence. Indications of gradual improvement are by no means lacking. A special inquiry into its keeping properties under different conditions, as well as an exhaustive survey of the material administered to the sick, is in progress and is expected to be completed at no distant date.

Fowler's Solution.—Both arsenical (Fowler's) solution and acid solution of arsenic have come under special notice during the past year. In 1909 and again in 1918 Fowler's solution formed the subject of special bulletins (Nos. 175 and 401) where it was shown that in the former case, out of 75 samples, thirty-six fell within 5 per cent of the correct figure and in the latter 29 out of 118 passed the same test of stringency. In the past year ninety-seven samples of Fowler's solution were examined, no fewer than seventy of which contained between 0·95 and 1·05 per cent of arsenious oxide.

The acid solution for which there is possibly a little more excuse for being off strength, owing to the volatile nature of arsenic trichloride, did not show up quite so well; only ten out of seventeen can be classed as satisfactory. All Ottawa samples of arsenic solution were above reproach.

Friar's Balsam.—Friar's Balsam has the misfortune of being composed of ingredients that lend themselves to gross adulteration. This fact has left the feeling that a satisfactory analysis is impossible unless very exhaustive. Steps have been taken to devise some means of discerning fraudulent products with reasonable dispatch. By the method finally adopted not only the total quantity of balsams and resins, but also the proportion of aromatic substances, can be determined without tedious manipulation. The method, however, is quite useless in certain cases of refined sophistication. That this matter needed attention is evident from the fact that 10 samples out of 16 were quite unsatisfactory, due without doubt, in the majority of cases, to the failure of the manufacturer to assure himself that his raw materials were genuine. Indeed, the materials purchased by the laboratory for control purposes in this work, though selected with considerable discrimination, themselves proved in the end to be impure.

Hydrogen Peroxide.—The necessity for eternal vigilance is exhibited in the record of this everyday article. Thirty-seven samples were picked up by inspectors in the course of their work; twenty of these were satisfactory, the remainder varying from one fourth of the proper strength upwards.

Inspection of Imported Medicines.—Upon repeated representations from the trade regarding shipments of medicinal products from Europe and insistent demands for enforcement of the law to the very letter, a strict inspection of importations has been instituted. No reconditioning has been allowed. As a consequence of this policy, 69 shipments comprising 150 articles have been returned to the country of origin and 11 more are presently under detention.

Milk of Magnesia.—Six samples of milk of magnesia of leading brands formed the basis of a preliminary inquiry into the quality of this product. Two of these were slightly low and one unnecessarily high in magnesium hydroxide content but there is evidence of need for more complete washing away of caustic soda. The variation in the permanence of the suspension was quite striking and seemed to indicate a lack of uniformity in precipitation conditions.

Nux Vomica Preparations.—Nux Vomica preparations have shown a gratifying change for the better since the publication in the *Canadian Medical Journal* of the results of a Dominion-wide survey. Eighty-three per cent satisfactory compares well with a previous 40 per cent passable.

Seidlitz Powders.—It seems incredible that such an elementary medicine as a seidlitz powder cannot be always correct. Yet ten out of forty-five samples are either of incorrect weight or improperly compounded. One sample contained twice the proper weight of tartaric acid and another labelled "improved" was not improved in any way at all. The chief point noted, however, was that manufacturers were generally disregarding the law in the matter of stating the contents on the outside of the package. The box being always the same size, one cannot guess whether there are six, eight or twelve powders inside; and the price is an unreliable guide. Repeated warnings have produced little or no effect and it is felt that resort to prosecution may be necessary to secure compliance with the terms of the Act.

Stramonium.—The physicians attached to the department, having encountered lack of concordance in results of administration of stramonium preparations in cases of Parkinsonism, an investigation of available supplies was made. Two brands of liquid extract were found satisfactory and two decidedly weak. This was only the preliminary to a larger study of the subject, which is still engaging attention.

Syrup of Iron Iodide.—Quite a number of samples of this syrup have come under notice during the year. On the whole, the general appearance and state of preservation is satisfactory but there is considerable room for improvement in potency. Only 4 samples were of proper strength; the remaining 26 varied from 5 to 37 per cent below standard. The probable cause of this is loss of iodine due to excessive heating in the process of manufacture; the reaction needs to be carefully controlled. The complaint that iodine was lost during storage was looked into and as expected, proved quite unfounded.

Sweet Spirit of Nitre.—Sweet nitre, owing to the volatile character of its principal ingredient, needs perennial supervision. In the examination of fourteen typical samples eight were found correct, three too strong and three below standard.

DRUGS, NARCOTIC

Five hundred and seventy-six samples of narcotic drugs have been examined at the request of the Royal Canadian Mounted Police and other departments of the Government during the fiscal year just closed. It is noteworthy that in no case has an analyst's certificate been overthrown by the court.

DRUG PREPARATIONS SOLD UNDER DISTINCTIVE NAMES

By the amendment of 1927 the sections of the Act dealing with misbranding were extended to include drugs as well as foods. Prior to that time there was no restraint placed upon the statements made by label, or by collateral advertising in the marketing of unregistered remedies, sold under distinctive names not to be found in any pharmacopoeia or in any generally recognized standard work on materia medica or drugs. It is obviously unfair to persons suffering from diseases such as tuberculosis, cancer, diabetes and goitre to induce them to believe that they can treat themselves satisfactorily by any such device. Objection must be taken to the practice, not only because such miscellaneous remedies are ineffective, but as a result of their use the sufferer is deflected from proper treatment, frequently during the period when the best remedial measures would be most effective. It is believed that much good has been done by compelling the withdrawal of these medicines from the market. Results were not accomplished without some difficulty, as it was necessary to institute several prosecutions and to follow them through the courts with proper counsel and expert witnesses. The following brief outlines deal with some of the outstanding cases.

India Goitre Tablets.—This remedy for goitre, which consisted of tablets of wood charcoal and dry thyroid, was exploited in a mail-order business conducted by a man trading under the name of Alice May. Contact with the public was made through an advertisement inserted in various newspapers and magazines, stating that " a lady who tried everything in vain and at last found a safe and simple remedy will now mail full particulars free." A request for particulars brought a circular letter offering the remedy for sale (at a price that must have been at least twenty times the cost of manufacture) and extolling its merits. The wording of the circulars was changed from time to time in various editions but the general tenor of all was the same, and objectionable throughout. It developed the claim that the remedy was mysterious, used in India where goitre is prevalent and found there after a long search to be really simple, safe and very effective. Repeated sweeping statements of its effect in completely removing or banishing goitre without any qualification or mention of types of goitre where its use would be ineffective or injurious were considered to be gross exaggerations and a violation of section 7 (*e*) of the Food and Drugs Act.

With the assurance that the remedy was safe, tablets containing thyroid, accompanied by a set of loose directions, were being distributed to patients for

self-administration, without any medical supervision. This is a dangerous procedure. It is well recognized in medical and other scientific literature that there is no simple rule for regulating the dosage of thyroid and that the patient should be kept under careful observation, in order to note the effects and to adjust the dose to accord with the conditions that arise. Any suggestion that such potent drugs as thyroid or iodides can be safely administered to a person afflicted with goitre without this competent skilled supervision, is misleading and constitutes a breach of section 7 (*h*) of the Food and Drugs Act.

A prosecution was laid against the vendor, the case heard and the contention of the department presented and supported by outside expert evidence. A conviction with fine and costs ensued. Existing stocks under seizure were confiscated and destroyed. Following the conviction, an order was issued by the Post Office Department refusing to this business any further use of the mails.

Alleged Cancer Cure.—An advertisement which appeared in several newspapers circulated in Western Canada offered to the public an alleged cancer cure under the caption " Cancer Cure $2.00, I cured myself," with an address in the Maritimes. Investigation of the matter by this department showed the " Cure " to consist of a regime of restricted, modified diet, fortified by doses of potassium bicarbonate which was sold for the purpose under the name of Concentrated Food.

A circular supplied with the " food " gave directions for its use and an outline of the diet to be followed with it. To all appearance the treatment was for self-administration by the patient, without any medical supervision. Advice given in the circular that the patient should report particulars so that directions could be altered to meet different requirements, seemed to be an offer on the part of the vendor to undertake the practice of medicine, although he was not a qualified practitioner. This is a matter that comes under the supervision of the provincial authorities, but claims concerning the therapeutic properties of drugs offered for sale come under the provisions of the Food and Drugs Act and within the sphere of this department. The so-called concentrated food was clearly a drug offered for the treatment of disease. The claim made that it would cure cancer is so contrary to medical experience that it was considered false and exaggerated, constituting misbranding under section 7 (*e*) of the Act.

In view of the fact, well recognized in medical science, that the only methods at present known for combating cancer successfully, depend on skilful treatment begun at the earliest possible moment, any proposal that causes a patient to delay in seeking the necessary skilful supervision is misleading and is held to be a violation of section 7 (*h*) of the Act. In this circular the patient was advised to continue using a worthless treatment for at least six months.

A charge was laid against the vendor for selling a drug which was misbranded under section 7 (*e*), (*f*), (*g*) and (*h*) of the Food and Drugs Act, and at the trial the department's position was supported by outside expert testimony. The magistrate found in favour of the charge and imposed a fine and costs. A quantity of the drug found on the premises of the vendor was put under seizure, subsequently declared forfeited under section 21 (2) of the Act and disposed of by destruction.

Radioactive Preparations.—Radium in company with two other elements has the curious property of spontaneously disintegrating with the accompanying phenomenon of the emission of rays which have an intense physiological potency. The first disintegration product of radium is a gas, radium emanation or radon, which also undergoes change with the emission of rays. The unusual and striking properties of radium as well as its use for the treatment of certain forms of cancer, have resulted in somewhat exaggerated notice having been given it in the daily press. For some years after its romantic discovery great hopes were held that a wonderful therapeutic agent had been given to the medical

profession and trial was made of radium in an immense variety of diseases. During this period enthusiastic workers announced wonderful results. Subsequently, and in the light of properly controlled clinical trials, the bulk of the results were negatived and at the present time the use of radium is severely limited. It is also better known now that radium is dangerous and should only be used clinically, by specially trained radiologists. The American Medical Association through its Council on Pharmacy and Chemistry has set a minimum daily therapeutic dose, on trial, of 2,000 milli-micro-grammes of radium or 2,000 milli-micro-curies of radon. Solutions, of concentrations giving doses below these amounts, are not recognized as being of any therapeutic moment whatever. Indeed, the commonly used doses of the specialists in radium therapy are very much in excess of these minima.

The somewhat optimistic earlier accounts by workers in radium therapy were seized and exploited through a variety of devices chief amongst which were those purporting to render drinking water radioactive, whilst others were in the nature of pads for local application, the activating agent being merely a radioactive ore such as carnotite with a radium content so small that recovery of the element therefrom is an unsolved economic problem. Although carntotite is relatively inexpensive, the devices all command a high price. The therapeutic claims accompanying these were remarkable, as much for their sweeping nature as for their slight basis in fact. In keeping with this class of sales material, an atmosphere of mystery and imitation science was prevalent and a wealth of testimonials offered as proof.

The so-called "Radium Ore Revigator," as being one of the most prominent of these products imported into Canada, was the first to be dealt with. Essentially it consists of a 2½-gallon stoneware crock lined with a radio-active ore. It retails for some $47.50, although the actual cost of manufacture is estimated at less than $5. The continuous disintegration of the radium in the ore produces the gas radon, which dissolves in the tap water with which the jar is filled. It is then claimed or insinuated in the mass of collateral advertising that the drinking of this water will banish many major diseases and, in addition to making healthy people healthier, will enable the user to ward off all diseases. As auxiliaries to these claims are attacks upon the city water supplies and an assumption that health springs of the world are successful only by virtue of their radio-activity.

A Revigator was obtained and filled with tap water according to the printed instructions, and analysis revealed that the water as used contained some 22·5 milli-micro-curies of radium emanation per litre. To obtain the minimum dose postulated above twenty gallons daily would have to be consumed; the dose advocated by the Revigator literature which would accomplish the remarkable cures claimed is but eight glasses daily or less than half a gallon.

These results were communicated to the Canadian representative, together with the opinion of the department that the Revigator was misbranded under section 7 (*e*) of the Food and Drugs Act on account of false and exaggerated claims on the label and otherwise. It being found impossible in two interviews to convince the vendor of the fundamental error in the marketing of these devices, prosecution was instituted in court. During the hearing, the evidence of officials of the department and that of an expert radiologist was presented. The defence was that the article was not a drug and that the vendor had believed that the device would accomplish all that it claimed, so that he had sold it in good faith. The magistrate agreed that the contentions of the department were fully upheld and gave judgment accordingly, imposing a fine of $25 and costs of $10, directing at the same time that the Revigator was worthless and must not be sold in Canada. The judgment was subsequently appealed against but the appeal was not heard during this fiscal year.

Another imported device similar to the Revigator is the Hammer Radium Water Activator, in which a brick of radioactive ore is the activating agent. An official sample imparted to tap water 24·4 milli-micro-curies of radon per litre and the Canadian agent was informed of this by the analyst's certificate and also that the Activator was regarded as misbranded under section 7 (*e*) and 7 (*h*) of the Food and Drugs Act. Subsequently his solicitor was advised that the analyst's certificate was for the information of his client with respect to the application of section (10) of the Act to future shipments of the Activator to Canada. The result of the application of section (10) is that a misbranded drug is held in customs and not admitted for use in Canada. The advertising of this device was objectionable, as in the Revigator case and the price inflated.

An article, the Radioak Generator, for charging drinking water with radon, was detained in customs in Alberta and, after being examined in our Ottawa laboratory, instructions were issued that it be refused entry into Canada. It was subsequently returned to the shippers at Oakland, California.

Pads containing radio-active material and going under the general name of "Radicura" were also examined. The pads were shaped for application to various portions of the body and were accompanied by a certificate of radio-active strength. Whilst analysis confirmed this certificate, a consideration of the therapeutic claims and the collateral advertising called for refusal of entry.

Attention was directed to large advertisements appearing in a western Canadian newspaper concerning Degnen's Radio-Active Solar Pad of Los Angeles, California. The senior inspector at Ottawa wrote as a prospective customer and, upon ignoring the reply, was bombarded with a series of follow-up letters from the concern responsible. These letters contained a form for self-diagnosis and a money-back guarantee, together with testimonials and claims of therapeutic benefits and cures to be derived from the use of the pads. The later letters contained an offer to sell on the instalment plan. The material contained in these letters, being false and exaggerated, was regarded as misbranding. The company marketing these pads was so informed and notified that further shipments would be liable to refusal of entry. Subsequently the Postmaster General was petitioned to deny this company the use of the mails, an order being issued accordingly.

The harmony of endeavour produced by collaboration with other departments of Government has been a very gratifying feature of this work.

A sustained effort will be made to protect the public from such grossly misbranded drugs.

NARCOTIC DIVISION

The Narcotic Division of the department had, as usual, a very busy year, and I am of the opinion that the narcotic situation in Canada has continued to improve. Such improvement, of course, is only relative, and is to a great extent occasioned by the increasing number of drug traffickers actually being incarcerated, together with the much greater co-operation with and control of the wholesale and retail drug stores, etc., authorized to handle narcotics, with a view to insuring that such quantities as are imported into Canada are put to proper use.

Canada does not manufacture narcotics, and all which enter into consumption are imported from outside her borders. While we have a complete and thorough control of all narcotics entering the country legally, it is, of course, a physical impossibility in a country the size of Canada for either the customs or any other governmental agency to completely prevent smuggling, particularly in connection with a commodity such as narcotics, where the difference in value between the legal and the illicit trade is so extreme; consequently, so long as, from a world standpoint, narcotics are available in a greater quantity than is required for the legitimate medical needs of the various countries of the

world, obviously such greater quantity will be trafficked in by unscrupulous persons, and problems created in various countries involving very considerable expenditures in the control and punishment of persons engaged in that deadly traffic.

An interesting feature in so far as Canada is concerned has been the marked increase in the number of attempts on the part of addicts to obtain narcotics from legal sources by illegal methods, such as thefts, hold-ups, false pretences, etc., due beyond question to the increasing difficulty experienced in obtaining supplies from underworld sources. It has also been noted that the number of addicts seeking the assistance of physicians, or endeavouring to be cured in hospitals, automatically increases as the arrest of a large trafficker is effected, and this situation is by no means limited to the actual city in which the arrest is made. It should not be assumed that an influx of such patients requesting a cure is a sign of grace on their part. Unfortunately, in many cases, it is merely a means of tiding over until another supply is located, while even if a cure is taken until withdrawal from the drug is complete, it so often results in the addict again reverting in a short time, and at much less expense to himself, due to his requiring a smaller dosage than that which his previous addiction had led him to need.

The percentage of reversion amongst addicts who have graduated into the criminal type is, and I am afraid will continue to be, distressingly large. In my opinion a cure is only partially effected with the withdrawal of the drug of addiction, and a much longer period of "building up," not merely bodily but mentally, is essential, and it is this freedom from former associations and difficulty in arranging for mental convalescence under proper surroundings which is so difficult to insure when dealing with the underworld type. How much greater, therefore, is the necessity for doing what is possible for those addicts, who, as stated in my last Annual Report, would almost certainly never revert if given the chance of cure under conditions involving the control of both of the patient and his narcotics during treatment, which are recognized as being absolutely essential if concrete results are to be obtained. There are many such cases, and it does seem worth while to urge upon the provinces, which have not already done so, to provide power of committal of such cases to an institution or, what might be equally satisfactory, to a local hospital where the stigma of "institutional treatment" would not arise. Without such power of committal, nothing can be done, as otherwise patients can leave as soon as the reduction of their dosage, or the complete withdrawal of the drug inconveniences them. Co-equal with committal is the necessity for accommodation, and rather than ask provinces to undertake the heavy initial expenditure involved in the construction of special institutions, with heavy subsequent maintenance, would it not be reasonable for the provinces to provide that hospitals in receipt of provincial grants should be obligated to treat such cases? The responsibility for the care and treatment of addicts is just as much a provincial obligation as that in connection with the tuberculous or the insane, but in view of the urgent social need for something to be done, possibly the above suggestions will be accepted in the spirit in which they are offered. In any case I am sure that the federal Department of Health would be only too glad to arrange for the medical staffs of such hospitals to be fully made aware of the latest technique in dealing with cases of this type.

The attending physician, especially in handling those cases which date back to the period antecedent to the narcotic law, is placed in a most unfortunate position, which is outlined in the statement placed in his mouth in my report of last year, which statement was very widely quoted throughout the press of this country, and which I think should bring home the situation to those in whose hands rests the power to ameliorate it: "It is against the law for me to continue

to treat these cases as I have done in the past, yet what am I to do with them? There are no institutions in my province where proper treatment is available, or if there is such a place, it is a private institution where the fees, in so far as my cases are concerned, are prohibitive."

With power existing to commit such cases to the nearest hospital in receipt of provincial funds, where the actual withdrawal of the drug could be effected, and a measure of control continued for a reasonable time thereafter, I am sure that in many cases of which we are aware the home surroundings are such as to render it highly probable that a large percentage would remain free from further addiction under the influence which would be available, in such marked contrast to the environment to which the average criminal addict is compelled to return, and that percentage would not only be saved to contribute usefully to society at large, but society would avoid the actual cost involved in their eventual control, police or otherwise, which is so often necessary when, as we know, their destination is the very underworld which they can be helped to avoid.

In so far as the legal traffic in narcotics was concerned, there was a very marked reduction in the amount of cocaine entering Canada during 1929, the figures being 1,960 ounces, as compared with 2,967 for the preceding year. A proportion of this reduction may be due to the efforts which this department has made in endeavouring to have non-habit forming drugs replace, so far as is possible, the use of cocaine, but after making due allowance for this, I think it probable that over a period of years Canada has not yet reached the point where her annual legal consumption of cocaine is less than two thousand ounces. In so far as morphine is concerned, the importation amounted to 7,468 ounces, as compared with 6,926 ounces in the previous year, an increase of over 500 ounces. The 1929 figure, however, is still below the average for the past four years, and may be considered normal after making due allowance for the various commercial conditions which affect importations from year to year. Similarly, with regard to crude opium, the quantity imported, namely, 1,084 pounds, while ten per cent heavier than the preceding year, may, I think, be considered normal.

During the year under review it was unfortunately necessary to institute proceedings in the courts against five members of the medical profession, one dentist, and two druggists. In four of the cases affecting physicians, substantial financial penalties were imposed, but in the fifth case, which was probably the most serious which this department has ever had occasion to institute against a professional man, a prison sentence was imposed, and I think, in view of the situation encountered, that there is justification for outlining the circumstances in connection therewith.

Doctor "A" was under strong suspicion for several years prior to the development of the case against him. As narcotics were not, so far as we could ascertain, furnished to addicts to take away, but were administered regularly, and on a very considerable scale, in his office, the situation was one which was considered to involve no question of a sudden or isolated departure from the ethics of the profession, but a deliberate and long sustained effort to evade the provisions of the Opium and Narcotic Drug Act. A suitable agent, not a narcotic addict, was subjected to a strict life insurance medical examination, and detailed to the case, with orders that under no circumstances was he to allow morphine to be administered to him. He interviewed the physician, who stated that he allowed no drugs to go out of his office, but that if he wanted a shot in the office he could get it three or four times a day, by paying cash on the spot, that he had several addicts who visited him regularly two or three times a day, but that the good old days were over. Arrangements were made for the agent to call at the office, and on each of many occasions he was searched and shadowed into the office, from which he eventually emerged with less money, and with a

piece of absorbent cotton, attached to his underwear, into which the dose of morphine with which he had been supplied had been shot, it being a common practice for addicts to insist upon using the needle themselves. Each of these pieces of cotton wool was sent to Ottawa for analysis, and found to contain morphine. As the agent's trips to Doctor "A's" office continued, an endeavour was then successfully made to sew, on each occasion, a glass vial with a rubber top to the agent's underwear, so that the full dose could, on arrival at Ottawa, be measured, and proof obtained that no attempt at reduction was being made. Twenty-three exhibits in all were obtained in the manner above indicated, all under police supervision. The doctor then agreed to sell cocaine, and told the agent to come to his office at 10.30 p.m. In doing so the agent was taken by the doctor for a ride in his car, and in the course of the ride the doctor would receive money and supply cocaine, immediately thereafter letting the agent out of his car. The price charged for the cocaine, for the supplying of which narcotic there could, of course, be no possible excuse, was $1 a grain; $15 for the fifteen grains supplied, or at the rate of $438 an ounce, which would cost the physician about $6 at a wholesale drug store. On a latter occasion he again supplied cocaine under the same conditions at 11 p.m., twenty-eight grains for $28, he having refused to deliver it in his office, stating that he might be picked up by the police. On one occasion he offered to introduce the agent to a party where cocaine could be purchased by the ounce for $75, a price which was subsequently increased to $100. Finally, when twenty-seven exhibits of morphine, heroin and cocaine were available, Doctor "A" was arrested immediately after selling morphine and cocaine to our agent in his automobile. Of the numerous charges preferred against him, he was committed to trial on eleven, found guilty on all counts, and sentenced to nine months' definite and twelve months' indefinite imprisonment. The judge in sentencing him stated that had the jury not recommended him for mercy he would have given him five years in the penitentiary.

In the case of one of the druggists, the firm involved was a wholesaler in possession of a narcotic licence from this department. Owing to the increasing number of attempts being made to obtain narcotics from the legal traffic, all licensed wholesalers were specially warned by circular from the Narcotic Division that they were absolutely prohibited from supplying narcotics to anyone except on a written order previously in their possession, in order that such order might be scrutinized by a responsible person before being filled. In order that the necessity for strictly adhering to this might be emphasized, licensed narcotic wholesalers were later again circularized, and required, at the time of applying for their next yearly licence, to give an undertaking that they would conform to this requirement. In spite of these precautions, one firm, on two occasions, received a telephone order for a considerable quantity of narcotics, ostensibly from a physician known to them, but actually from a man posing as such physician. The narcotics were dispatched to the doctor's office, the messenger on arrival there finding a man waiting outside the door who claimed, paid and signed for the parcel. On the messenger's return to the wholesaler's office, an inspection of the signature showed same to be a forgery. This was a very common trick, until these special precautions regarding same, outlined above, were taken, and in view of the very definite departure of the firm in question from the instructions received from the department, as also from their own undertaking in the matter, they were charged with a breach of the Act and fined $200 and costs.

With regard to the illicit traffic, it will be noted that there has been a further decrease in the actual number of convictions obtained. A study of the conviction tables at the end of this report, however, will reveal the interesting fact that, whereas in preceding years the number of cases in which the option of a fine was given, largely exceeded those in which a jail sentence, with no option

of a fine, was imposed, in the year now under review, the situation was reversed, and 240 of the 430 cases dealt with resulted in jail sentences. This undoubtedly is due to the fact that we have been relentlessly pursuing the more important traffickers, and in the twelve months ending March 31, 1929, the following sentences, amongst others, were imposed: 1 of 7 years, 11 of 5 years, 4 of 4 years, 8 of 3 years, 9 of 2 years, and 38 of 1 year and over.

Table 1(A) showing details of infractions against the Opium and Narcotic Drug Act for the judicial year ending September 30, 1928, has been carefully adjusted with the records of the Dominion Statistician; all duplications due to prisoners having been convicted on more than one count have been eliminated, while the headings have been changed so as to indicate more clearly the exact type of crime for which convictions were obtained. It may be said that 430 different individuals were convicted, and that of that number 235 were guilty of either possessing, selling or distributing narcotic drugs. It should be borne in mind that it is very often necessary to charge a trafficker with possession rather than selling or distributing. Conditions are sometimes such that it is impossible to disclose the identity of the agent or have him give evidence in court, and this is avoidable when the prisoner is arrested with the actual drugs in his possession, which we know he would otherwise have sold to the individual whose identity could not be revealed; consequently, it is not safe to assume that only the 52 convicted of selling or distributing were traffickers, while the 183 convicted of possession of drugs were their unfortunate victims. On the contrary, the very large majority of possession charges involved persons known by us to be traffickers.

As will be noted from table No. 6, 78 aliens were deported as a result of having been convicted of offences under the Opium and Narcotic Drug Act, and that in the seven years during which this most useful provision has been effective, 662 persons have been so deported. No less than 519 of this number were Chinese.

During the year, as Parliament had ratified the International Opium Convention, it was felt that a good opportunity presented itself to review, and if possible strengthen the Canadian narcotic legislation. As a result, therefore, a Bill was presented to Parliament, which was referred to a special committee of the House of Commons, and in due course to a committee of the Senate. At the several sittings of the House of Commons' committee, representatives of the Canadian Pharmaceutical Association and other interested bodies presented their views in connection with matters in which the control of the legal traffic in narcotics was involved, and as this department has always been most anxious to co-operate as much as is possible in matters affecting this branch of the work, no difficulty was experienced in adjusting same, particularly as the representatives of the association in question were most receptive of the department's point of view, in so far as the protection of narcotics held for legal sale from the efforts of unscrupulous addicts to obtain same were concerned. In dealing with that part of the Act affecting illicit trafficking, our hands were greatly strengthened by the inclusion of a provision for the application of the lash at the discretion of the judge. When this was under discussion it was possible to furnish, in confidence, details of several cases to the committee which were of so terrible a nature that it was felt that the lash would be more than justified if similar cases recurred. One matter for congratulation is the undoubted fact that we have at last unquestionably obtained a strangle-hold upon the large "higher ups" engaged in the narcotic traffic on the Pacific coast. Twenty-six of these gentry received penitentiary sentences ranging from two to seven years in British Columbia alone during the period under review. Subsequent thereto even greater success has been achieved, and a number of most interesting cases of international importation have been handled, and long penitentiary terms awarded the transgressors. These cases, however, will be dealt with in my next annual report.

In Alberta and Saskatchewan, Calgary and Saskatoon are points which receive considerable attention at our hands, but the trafficking is largely local.

In Manitoba, however, Winnipeg is known to us as a " Heroin City " in that practically every case which comes to our attention involves the use of that most dangerous drug, whereas those involving morphine are comparatively unknown. A number of most bitterly contested cases have been launched against certain well known and important traffickers in that city, with the result that a number of sentences of two, three, four and five years in the penitentiary have materially aided in clearing up the situation which was none too good, which work has continued even to more satisfactory conclusions since the close of the fiscal year under review.

In Ontario, Toronto is the point which requires the most attention, and a number of interesting and important cases have been developed in that district, one of which was of an international nature, some details in connection with which may prove of interest. During the course of a search for a Chinaman, who had been convicted of a narcotic offence in Montreal, and had escaped deportation, there was reason to believe that he would be found at a certain time in a certain room of the Ford hotel at Toronto. When the room was visited, however, there was no trace of the Chinaman, nor of the Italian owner of the room, but a stranger was found asleep on the bed, who gave what proved to be a false name, and in a bag in the room were found five pounds of gum opium. All the other contents of the bag were those of the Italian occupant, who arrived on the scene shortly afterwards, and was also arrested. The stranger on the bed, however, claimed to be a bootlegger from New York, but after arrest and finger-printing, he was found to be a well known criminal with no less than forty-nine previous convictions. After careful and extensive inquiries of numerous hotels, he was definitely associated with a room in the King Edward hotel, and with a bag in which a further nine pounds of gum opium were found. He pleaded guilty in due course, and in view of his past record was lucky to escape with a sentence of three years' penal servitude. He was from New York, while the Italian was from Montreal, and the Chinaman who was also arrested, and in due course deported, was proved to have been in association with them. There is no doubt that this gum opium was brought in from the United States.

In so far as the province of Quebec is concerned, Montreal, for a number of years, has proved to be a very sore spot in the narcotic traffic, but I am glad to state that a very marked improvement has now taken place in that city. Drug trafficking, of course, will never be completely eliminated from that city or any other of the same size, but the operations of large rings and the exportation of large quantities of narcotics to United States points is, we feel certain, a thing of the past. Several comparatively small peddlers were arrested and convicted, but no further important cases engaged our attention.

In so far as the Maritime Provinces are concerned, very few convictions indeed were obtained, and the problem is not one which may be looked upon as at all serious in that part of Canada.

I feel that year by year Canada has progressed and is progressing in its control of the narcotic problem. There are infinitely more known narcotic traffickers in our jails and penitentiaries than are at large. Our policy of steadily concentrating on the " higher ups " has proved wonderfully productive, but at the same time the smaller cases have been by no means ignored, and in this regard I wish to pay particular tribute to the efforts and co-operation of the British Columbia Provincial Police, and the municipal police forces of Toronto, Winnipeg and Vancouver.

In federal cases in Canada, the work of the Royal Canadian Mounted Police has been of the highest calibre. It is a great pleasure to bear testimony to the unswerving zeal and cleverness displayed by the members of that force.

Narcotic work is undoubtedly interesting, but demands, on the part of police officers, patience and cleverness to a marked degree. This has been particularly exemplified on the Pacific coast.

As in previous years our relations with the narcotic authorities of the United States have been most cordial. The closest co-operation exists, and is most valuable, particularly as the invisible boundary between the two countries is one which means nothing to the narcotic trafficker.

With the Central Control Board now functioning at Geneva; with, we hope, steps about to be taken to at least consider the question of restricting the manufacture of narcotics to an approximation of the world's medical needs; with co-operation with the authorities of other countries all that could be desired; with new Canadian legislation now available which shows us that the sympathy of Parliament is behind the department in its narcotic work, and with the unstinted efforts being made to run down the illicit trafficker, there is no reason why Canada should not look forward to occupying and continuing to occupy a position wherein she can claim that her obligations, both to civilization as a whole, as exemplified by adherence to the International Opium Convention, and to her own citizens, by the control of the legal and illegal traffic in narcotics, are being fulfilled in a manner which would bear comparison with that of any other country.

TABLE 1A.—DETAILS OF INFRACTIONS AGAINST THE OPIUM AND NARCOTIC DRUG ACT, FOR THE JUDICIAL YEAR ENDED SEPT. 30, 1928

Province	Nature of Offence						
	Possession of Drugs	Selling or Distributing	Smoking Opium	Frequenting opium den	Possession of pipes, etc.	Not defined	Totals
Prince Edward Island	.....	.....	1	.....	.....	.....	1
Nova Scotia	.....	.....	.....	.....	.....	.....	.....
New Brunswick	.....	.....	3	.....	.....	.....	3
Quebec	50	3	30	22	.....	.....	105
Ontario	39	3	11	8	6	9	76
Manitoba	21	3	.....	.....	1	.....	25
Saskatchewan	6	5	.....	2	1	1	15
Alberta	2	2	.....	.....	.....	1	5
British Columbia	65	36	24	37	20	18	200
Totals	183	52	69	69	28	29	430

CONVICTIONS—YEARS ENDING SEPTEMBER 30, 1925 TO 1928

Year	Nature of Offence						
	Possession of Drugs	Selling or Distributing	Smoking Opium	Frequenting opium den	Possession of pipes, etc.	Not defined	Totals
1925	381	55	139	208	.....	52	835
1926	302	33	149	180	.....	79	743
1927	163	37	85	81	.....	124	490
1928	183	52	69	69	28	29	430

DETAILS OF SENTENCE—YEARS ENDING SEPTEMBER 30, 1925 TO 1928

Year	Given Option of a fine	Jailed with no Option
1925	546	280
1926	474	263
1927	327	159
1928	190	240

TABLE No. 1B.—DETAILS OF INFRACTIONS AGAINST THE OPIUM AND NARCOTIC DRUG ACT FOR THE JUDICIAL YEAR ENDED SEPTERMBER 30, 1928

Province	Total convictions		Sentence		Racial Origin												
	Male	Female	Option of a Fine	Committed without option	British and American	Chinese	French	Italian	Scandinavian	Greek	Finnish	Polish	Russian	Hindu	Japanese	Not known	Totals
Prince Edward Island	1		1			1											1
Nova Scotia																	
New Brunswick	3		3			3											3
Quebec	95	10	54	51	45	51	2	2		1			1			3	105
Ontario	72	4	32	44	35	40		1									76
Manitoba	24	1	1	24	13	4			2			2				4	25
Saskatchewan	15		1	14	5	10											15
Alberta	5		2	3	4											1	5
British Columbia	198	2	96	104	14	177	4		1					2	2		200
Totals	413	17	190	240	116	286	6	3	3	1		2	1	2	2	8	430

TABLE No. 2

(a) Number of Import and Export Licences issued during the Fiscal Year ended March 31, 1929.

Country from which Imported	Number of Licences issued
United States	176
France	57
England	31*
Germany	12
Holland	2
Switzerland	2
Belgium	1
Total	281

* Two cancelled at the request of the importer.

Country to which Exported	Number of Licences issued
Newfoundland	64
England	1
	65

(b) Number of Wholesale and Retail Druggists' Licences Issued for the Calendar Year 1929.

Wholesale Druggists	112
Retail Druggists	23

Table No. 3.—Amount of Narcotic Drugs Imported into Canada during the Fiscal Years ended March 31, 1919-1929

—	Cocaine (Ozs.)	Morphine (Ozs.)	Crude Opium (Lbs.)
1919	12,333	30,087	34,262
1920	6,968	28,198	13,626
1921	3,310	12,214	2,953
1922	2,952	8,774	1,700
1923	3,330	10,998	1,373
1924	1,561	7,092	845
1925	1,589	7,424	655
1926	2,633	8,651	810
1927	2,659	8,873	1,020
1928	2,967	6,926	970
1929	1,960	7,468	1,084

Note.—Morphine includes diacetyl-morphine (heroin).

In addition to the amount of narcotics imported during the twelve months ended March 31, 1929, the following amounts of seized drugs were disposed of, to licensed wholesalers in Canada:—

TABLE No. 4

By the Department of Pensions and National Health ..... Nil

By the Department of National Revenue, Customs-Excise Preventive Service—

Drug	Quantity
Gum Opium	9 lbs.
Cocaine	68¼ ozs.
Heroin (Diacetyl-morphine)	153 "

TABLE No. 5.—SUMMARY OF NARCOTIC DRUGS EXPORTED FROM CANADA, DURING THE FISCAL YEAR ENDED MARCH 31, 1929.

Kind of Drug	Destination	Quantity
Morphine (11,754 tablets and pills)	Newfoundland	9 ozs. 31 grs.
Morphine (bulk)	Newfoundland	5 ozs.
*Morphine (bulk)	England	1,640 ozs.
Heroin (Diacetyl-morphine) (3,200 tablets)	Newfoundland	399 grs.

* Previously seized by the Department of National Revenue, and sold, with the consent of the Department of Pensions and National Health and the British authorities, to Messrs. J. F. Macfarlane and Company, London, England.

PREPARATIONS CONTAINING NARCOTIC DRUGS

Chlorodyne (Newfoundland)	144 ozs.	
Cholera Infantum mixture (Newfoundland)	240 ozs.	Each fluid ounce contains 4 minums of tincture of camphor compound.
Elixir Heroin and Terpin Hydrate (Newfoundland)	4,720 ozs.	Each fluid ounce contains $\frac{1}{4}$ gr. of heroin.
Elixir Terpin Hydrate and Creosote Compound (Newfoundland)	1,120 ozs.	Each fluid ounce contains $\frac{1}{8}$ gr. of heroin.
Hydro-Bromic Compound (Newfoundland)	144 ozs.	Each fluid ounce contains $\frac{1}{4}$ gr. of morphine sulphate and 1 gr. of Cannabis indica.
Ichthy-Tannic Suppositories (Newfoundland)	1,180	Each suppository contains 1 gr. of pdr. opium.
Ointment Galls with Opium (Newfoundland)	352 ozs.	
Ointment Hemorrhoidum (Newfoundland)	16 ozs.	Each ounce contains 20 gr. of opium.
Syrup Bronchial Sedative (Newfoundland)	160 ozs.	Each ounce contains 4 minums of opium camphorated.
Syrup Heroin and Glycerine Compound (Newfoundland)	160 ozs.	Each ounce contains $\frac{1}{4}$ gr. of heroin.
Syrup White Pine and Tar (Newfoundland)	1,040 ozs.	Each ounce contains $\frac{3}{16}$ gr. of morphine sulphate.
Syrup White Pine, Eucalyptol and Honey (Newfoundland)	4,640 ozs.	Each ounce contains 80 minums of tincture of opium camphorated.
Suppositories Opium (Newfoundland)	240	Each suppository contains 1 gr. of opium.
Tincture of Opium, B.P. (Newfoundland)	96 ozs.	

PILLS, TABLETS, ETC.

Tablets Bronchitis Special (Newfoundland)	4,200	Each tablet contains $\frac{1}{12}$ gr. of heroin.
Tablets of C.T. Cholera Infantum (Newfoundland)	500	Each tablet contains 3 minums of tincture of camphor compound.
Tablets C.T. Dover's Powders (Newfoundland)	5 grs.	3,200 tablets.
Tablets Diarrhoea (Newfoundland)	1,500	Each tablet contains $\frac{1}{12}$ gr. of morphine.
Tablets C.T. Coryza (Newfoundland)	100	Each tablet contains $\frac{1}{64}$ gr. of morphine.
Pills, Camphor, Opium and Lead Acetate (Newfoundland)	500	Each tablet contains 1 gr. of opium.
Tablets, cold (Newfoundland)	200	Each tablet contains 2 grs. of Dover's Powders.
Tablets C.T. Dover's Powders (Newfoundland)	3 grs.	1,000 tablets.
Pills Lead and Opium (Newfoundland)	11,000	Each pill contains $\frac{1}{4}$ gr. of opium.
Pills Lead and Opium (Newfoundland)	700	Each pill contains 1 gr. of opium.
Pills Lead and Opium (Newfoundland)	2,000	Each pill contains 4 grs. of opium.
Tablets Nausea (Newfoundland)	1,100	Each tablet contains $\frac{1}{32}$ gr. of cocaine hydrochloride.
Tablets Neuralgic (Newfoundland)	1,000	Each tablet contains $\frac{1}{4}$ gr. of extract of opium and $\frac{1}{4}$ gr. Cannabis Indica.
Tablets Oculets (Newfoundland)	192	Containing $2\frac{1}{2}$ grs. of cocaine.
Tablets Opium and Camphor, Tannin (Newfoundland)	500	Each tablet contains $\frac{1}{4}$ gr. of opium.
Tablets Throat Mentholated (Newfoundland)	1,000	Each tablet contains $\frac{1}{1\,1\,0}$ gr. of cocaine muriate.

TABLE No. 6.—NUMBER OF ALIENS DEPORTED FROM CANADA HAVING BEEN CONVICTED OF OFFENCES UNDER THE OPIUM AND NARCOTIC DRUG ACT, DURING THE SEVEN CALENDAR YEARS ENDED DECEMBER 31, 1928.

—	1922	1923	1924	1925	1926	1927	1928	Totals
Chinese	4	92	125	88	86	55	69	519
Czecho-Slovak				1				1
East Indian						1		1
English		2	1	1				4
French		2		1				3
Greek		1						1
Irish		1						1
Italian		2	2	2			1	7
Japanese			1				1	2
Philippino		1						1
Roumanian					1			1
Scotch				2				2
Swedish			1				1	2
Swiss							1	1
U.S.A. Citizens	11	29	24	24	10	13	5	116
Totals	15	130	154	119	97	69	78	662

TABLE No. 7.—AMOUNT OF NARCOTIC DRUGS SEIZED OR REMOVED FROM ILLICIT CHANNELS DURING THE FISCAL YEAR ENDED MARCH 31, 1929.

Opium—			
Opium, crude	23 lbs.	6 ozs.	
Opium, smoking	6 lbs.	9 ozs.	22 grs.
Opium seconds (Yen-She)	1 lb.	2 ozs.	146 grs.
1,629 tins of smoking opium containing	814 lbs.	8 ozs.	
14 tins of smoking opium (2 oz.) containing	1 lb.	12 ozs.	
277 jars of smoking opium (1 oz.) containing	17 lbs.	5 ozs.	
12 bricks of smoking opium	12 lbs.		
2 half-bricks of smoking opium	1 lb.		
*Decks of smoking opium	717		
Decks of Yen-She (seconds)	30		
Decks of powdered opium	1		
Pills of opium	175		
Tincture of opium	1 lb.	2 ozs.	140 grs.
Morphine—			
Morphine		143 ozs.	266 grs.
*Decks of morphine	144		
Cubes of morphine (approx. 3 grs. each)	800		
Tablets of morphine	4,195		
Cocaine—			
Cocaine		87 ozs.	22½ grs.
*Decks of cocaine	136		
Tablets of cocaine	391		
Capsules of Cocaine (3 grs. each)	2		
Heroin (Diacetylmorphine)—			
Heroin		2 ozs.	129 grs.
*Decks of heroin	145		
Tablets of heroin	293		
Capsules of heroin (3 grs. each)	20		
Alleged Drugs—(Miscellaneous) including morphine, cocaine and heroin.			
Drugs, alleged		4 ozs.	430 grs.
*Decks of drugs	94		
Tablets of drugs	288		
Capsules of drugs (3 grs. each)	50		
Paraphernalia—			
Opium lamps	194		
Opium lamp globes	28		
Opium smoking pipes	117		
Opium pipe bowls	33		
Opium scales (Chinese)	23		
Scrapers (opium pipe)	36		
Yen-Hocks (needles)	87		
Opium tins empty	17		
Syringes, hypodermic	30		
Pharmacist's scales	3		

* A deck is a small package containing from two to five grains of drugs.

PROPRIETARY OR PATENT MEDICINE DIVISION

The activities of the Proprietary or Patent Medicine Division during the fiscal year ended March 31, 1929, were directed chiefly towards raising the standard of secret formula medicinal preparations sold in Canada, and eliminating exaggeration from labels, wrappers, circulars and other advertisements used in connection therewith.

To further this end, the provisions of sections 8 (*e*) and (*f*) of the Act were more rigidly enforced than in the past. Some opposition was encountered, but, where necessary, the department did not hesitate to institute legal proceedings. In each case prosecuted the court confirmed this policy of the department, and in one important case in Toronto the constitutionality of the Act was unsuccessfully challenged.

A special review was made of certain classes of medicines previously registered, and, as a result, a number of manufacturers were forced to abandon registration and print a full explanation of composition on the labels and wrappers of their medicines, or withdraw from the Canadian market. In some cases the alternative of printing the list of ingredients on the labels and wrappers and otherwise complying with "The Food and Drugs Act" was considered illegal, and, therefore, not permitted; the department taking the stand that the sale of medicines designed for self-administration by the public without skilled supervision, and recommended for one or several definite diseases, the types of which vary and are known to be frequently attended with other grave disorders, is misleading the consumer, inasmuch as his condition may be extremely aggravated, or his life endangered by their use.

Seven hundred and five new medicines were registered; the registration of 4,731 were reviewed, and a total of 5,436 licensed for the year; 624 labels, 130 cartons, 217 circulars, and 30 newspaper advertisements were condemned; 207 special samples were procured and examined as to labelling, and 17 others were specially analysed; the Advisory Board approved 83 preparations as sufficiently medicated, and rejected 39; 496 registration numbers were cancelled; 157 applications for registration rejected; 21 seizures were made.

The inspection service had full co-operation with the customs officials, and rendered particularly valuable service in reporting and stopping the importation of illegal medicines.

The uninvited indiscriminate distribution of samples from door to door, through the mail, or upon a public place or highway is prohibited. The violation of this prohibition is rare; offenders are promptly penalized.

Of the preparations registered, ointments comprise the largest number; next in numerical order are: tonics, liniments, laxatives, and cough remedies.

POLLUTION OF INLAND WATERS

The work of the Public Health Engineering Division included:—

(*a*) Supervision of the quality of drinking and culinary water supplies and water supply systems on vessels navigating the Great Lakes and inland waters of Canada.

(*b*) Supervision of water supplies and general sanitary conditions of common carrier railways engaged in international and interprovincial traffic.

(*c*) Co-operation with the engineering division of the United States Public Health Service and provincial Departments of Health.

(*d*) Assistance to the Canadian National Parks Branch and the North West Territories Branch in regard to sanitary facilities, water supplies, bathing places, etc., and their pollution by human wastes.

(e) Special activities, under which heading is included a preliminary report concerning the Chicago Drainage Canal. An investigation of the hazards from dust to which men engaged in handling grain are exposed, etc.

During the year the supervision of this office extended to vessels of Canadian and foreign registry plying the Great Lakes and St. Lawrence river. These foreign vessels included a considerable number of Norwegian, Swedish and Danish ships, many of which were under the direct supervision of the New York District Sanitary Engineer of the United States Public Health Service.

Due to a combination of circumstances, such as: the Great Lakes are bodies of fresh water that have been used extensively untreated for drinking-culinary purposes on vessels, and that the adjoining cities and the lake-navigating vessels dispose of their wastes into the lakes, it is necessary to supervise vessel drinking and culinary water supplies and water supply systems very thoroughly and frequently.

Special consideration was given to the source of water supply of vessels tied up for the winter and fitting out either in the fall or early spring. Carelessness in regard to this matter having been definitely demonstrated to have resulted in a recent case of typhoid fever at Port Arthur, Ont.

The co-operative arrangement with the United States Public Health Service was extended to the mutual benefit of both countries. More accurate information has been made available regarding vessel movements, water supplies, laboratory analyses, and sanitary conditions.

Conferences with sanitary engineers, Tarbett, Shaw and Fisher, were instrumental in providing for more effective co-operation.

The necessity for co-operation among the nations of the world in preventing the spread of diseases dangerous to public health has been more widely recognized during recent years than formerly. Experience has demonstrated that disease does not regard international boundaries, and the advance in the facilities for rapid transportation increases the danger of the introduction and spread of communicable diseases.

A note of warning regarding an economic loss that is charged to pollution of the waters of lake Ontario by sewage was given at a recent public meeting in Toronto. The speaker stated that in 1870 the streams and rivers tributary to lake Ontario were teeming with deep sea salmon. It took only thirty years to drive them entirely out of Ontario waters. In this connection it is noted that quantities of shad died in lake Ontario during the summer of 1928.

During 1928 preliminary steps have been taken in Great Britain and the United States to reduce the pollution of waters. In Great Britain a Joint Advisory Committee was appointed by the Ministers of Health and Agriculture and Fisheries to consider and from time to time report upon the position with regard to the pollution of rivers and streams, and on any legislative, administrative or other measures which appear to be desirable for reducing such pollution.

In their report the committee pointed out that, in spite of the fact that administrative authority was available for enforcing the law for preventing the pollution of rivers many of the rivers were seriously polluted.

At a meeting of the State Health Officers of Minnesota, Wisconsin, Illinois, Indiana, Michigan, Ohio, Pennsylvania and New York, in St. Paul, a resolution was adopted which instructed and authorized the sanitary engineers of their respective states to meet and form an organization to proceed with studies and investigations to determine the nature, degree, cause and sources of pollution and recommend plans and methods for interstate co-operation on the part of signatory states.

The Great Lakes constitute the source of the St. Lawrence river, and with that river provide access from the sea to the heart of the North American continent. This has been realized almost since the inception of settlement, and each succeeding generation has emphasized its belief in the importance of this waterway.

Taking Belle Isle as the eastern end of the St. Lawrence system, the length of the waterway, Belle Isle to Fort William, totals 2,219 miles, or Belle Isle to Duluth totals 2,399 statute miles.

It is true that other rivers, the Amazon, the Mississippi, etc., may be longer, but in permanency of all channels, natural or artificial, in uniformity of flow, in magnitude of power resources, colour, etc., the St. Lawrence system is a unique world phenomenon, so that its pollution by the unrestricted discharge of sewage is a serious problem.

The Great Lakes-St. Lawrence system forms at present two main navigation divisions: the upper lakes division (Erie, Huron, Michigan and Superior, with their connecting channels); and the lower lakes-river St. Lawrence division. In the upper lakes navigation of 20 to 21 feet draught is possible, while in the lower lakes 14 feet is the maximum draught possible. The typical upper lake steamship is one of 10,000 to 13,000 tons. The typical lower lake vessel is of 2,300 tons. Under present conditions an upper lake freighter brings to Port Colborne at the upper entrance to the Welland canal sufficient grain to form the cargo of four or five lower lakes carriers.

In any study of traffic on the Great Lakes two points should be observed, viz., first, the great magnitude of the traffic and, second, that the importance of lake traffic is increasing steadily.

The present St. Lawrence waterway is one of the most notable waterways in the world, both as regards its tonnage and its characteristics. The tonnage at Sault Ste. Marie—a focus of upper lake traffic routes—is in round figures 90,000,000 tons per annum.

1927—tonnage through Panama canal.....	28,610,000
1927—tonnage through port of London.....	26,288,000
1927—tonnage through port of Liverpool.....	20,739,000
1927—tonnage through Suez canal.....	28,965,000

Some idea of the traffic movement on the St. Lawrence river is obtained from the fact that grain exports from Montreal in 1927 amounted to 195,247,914 bushels or almost as much as the total combined exports from five such leading United States ports as New York, Baltimore, Philadelphia, New Orleans and Galveston.

The number of passengers carried, during the season of 1928 by the larger steamships and ferries that ply into Canadian ports on the Great Lakes and St. Lawrence river as given in detail in the table in the appendix to this report totalled 21,828,187.

The continued growth of traffic on the Great Lakes and St. Lawrence river is reflected in the construction of additional grain elevator capacity and port terminal facilities at Port Arthur, Midland, Toronto, Prescott and Montreal and the projected development of similar facilities at Meaford, Penetanguishene, etc.

The Montreal grain trade which consisted largely of reshipments loaded at Buffalo and Port Colborne was handled by some one hundred and sixty steamships of the Canadian fleet, a dozen or more vessels of United States registry and by more than thirty Norwegian, Swedish and Danish ships that crossed the ocean early in the year for the express purpose of taking part in the trade and to return to Europe with a full cargo at the close of navigation.

During the latter weeks of the 1928 season of navigation some thirty Norwegian steamships passed down the St. Lawrence river outward bound with cargoes of American and Canadian grain. These vessels had been engaged in traffic from American ports to Montreal under the provision of a most favoured nation convention stated to have been drawn up in March, 1823.

A recent summary of shipbuilding in Great Britain during 1928 shows that a number of steamships were built for Canadian ownership. The largest of of the ships were built on the northeast coast of England and were for the Canadian lake trade.

The gigantic strides in rehabilitation of the Canadian fleet for service across lake Ontario to Montreal is noteworthy. During the war period the Canadian fleet of steel vessels small enough to transit the Welland and St. Lawrence canals, yet staunch enough for ocean service, was so depleted as to almost reach a vanishing point. From the beginning of 1922 to the close of the present year, however, the Canadian lake fleet of canal size steamships has been increased by eighty-nine new vessels built in British yards and by fifteen ships built in Canadian yards. Furthermore, this particular fleet has been augmented by thirty-two vessels purchased and by the return of thirteen of the pre-war fleet that escaped the submarines. Thus the additions as noted total one hundred and forty-nine ships. Early in the season of 1929 this fleet will be further enlarged, twenty-four more steamships having been ordered from British shipbuilders, and two others are in process of construction in Canadian yards.

Canada Steamship Lines has two package freighters under construction at Lauzon and Midland respectively and will shortly start on construction of an upper lakes freight steamship of which the proposed dimensions will be as follows: length over all, 596 feet; breadth, 60 feet; moulded depth, 32 feet.

Sarnia Steamships Limited has ordered four Welland canal size steamships to be built at Wallsend-on-Tyne.

Tree Line Navigation Company Limited has ordered a single deck bulk freighter steamship of canal size which is to be built at South Bank-on-Tees.

According to press notices five new freight carriers are to be constructed during the year for Paterson Steamships Limited of Fort William, which will bring the total of this company's fleet to thirty-one.

Work in connection with the supervision of vessel water supplies was continued throughout January and February, 1929, through the medium of a series of lectures that were given at the Schools of Navigation and Marine Engineering at various ports on the Great Lakes system. In this manner it was possible to get into contact with the coming generation of ships' masters and engineers under the best circumstances and at a time when questions could be asked and answered. The actual field work was commenced early in March, 1928, and carried on until the close of December. The data for the report submitted has been gathered throughout this period.

During the season of 1928, 2,166 routine visits to Great Lakes' vessels were made by health officials, this total including certain examinations of steamship water supply systems which were carried out in response to the special requests of various steamship operators.

In addition to the physical examination of water supply systems installed on various steamships, information and advice of a technical nature and copies of reports showing the quality of water supplies were supplied to navigation companies.

Plans of Canadian passenger and freight vessels under construction at shipyards in both Great Britain and Canada after reviewal were approved as regards drinking and culinary water systems. Features of design of drinking and culinary water systems were brought to the personal attention of officials of the shipbuilding companies so that in future satisfactory water supply systems may be installed on new vessels.

An important branch of activities at the harbour of Montreal is the supply of fresh water to ships. Hydrants are located at intervals along the water front, and several crews of men are employed during the navigation season filling orders for water for boilers and drinking water tanks on vessels about to sail. A motor truck is used to convey lengths of hose from the drying towers to the vessels. During 1927 a total of 18,775,000 gallons of fresh water was supplied to vessels, being an increase of 4,400,000 gallons over the quantity of water so supplied in 1923.

During the season of navigation of 1927 a total of 379 vessels entered the port of Montreal from the lower St. Lawrence and Newfoundland, while from the inland waters the number of vessel entrances amounted to 6,188 with a tonnage of 12,375,564.

The record of arrivals and departures of vessels at the port of Quebec for 1927 shows a total of 327 coasting vessels as having arrived from Montreal and the Great Lakes, in addition to 320 coasting vessels that arrived at Quebec from lower St. Lawrence points and seawards.

While there has been a decided improvement in the quality of the water supplied for drinking and culinary purposes aboard a considerable number of the Canadian vessels on the Great Lakes, the constant attention of the persons responsible will be necessary in order that water supplies of standard quality may be always available.

Correspondence and interviews with health and navigation officials and other persons concerned were carried on regarding the certification of water supplies available at various ports. In this connection visits have been made to nearly all of the Canadian ports on the Great Lakes system to study in detail the facilities available for the supply of drinking and culinary water from certified shore sources.

Throughout the season steamship companies operating vessels in Great Lakes' traffic have been supplied regularly with copies of water analyses reports and, wherever it has seemed advisable, attention of the management of these organizations was drawn to flagrant carelessness or violation of the regulations.

This is in reality a summary of the results of the co-operation of various health officials at Great Lakes ports and the definite efforts of eighteen of these persons to secure the maintenance of supplies of water for drinking and culinary purposes of the standard of the regulations. As during previous seasons of navigation vessels have been boarded by Canadian health officials at the ports of Quebec, Montreal, Aultsville, Morrisburg, Prescott, Gananoque, Kingston, Cobourg, Toronto, Welland Canal, Port Dover, Port Burwell, Port Stanley, Chatham, Windsor, Sarnia, Owen Sound, Midland, Port McNicoll, Sault Ste. Marie, Port Arthur and Fort William. The findings of the subsequent analyses of water samples thus obtained have emphasized the necessity for general compliance with the regulations and have been also a powerful aid in accomplishing the improvements made to the water systems of various vessels.

During the season of navigation of 1928 visits were made to a number of the larger passenger vessels engaged in traffic on the St. Lawrence river and through the co-operation of the Provincial Sanitary Engineer of the province of Quebec it was possible to induce the vessel owners concerned to very materially improve the quality of the supplies of water for drinking and culinary purposes available aboard their steamships.

The amount of office work has grown appreciably co-incident with the enlargement of the field of operations and co-operation with other government departments.

Tourist traffic on lake Winnipeg is largely handled by two steamship companies that operate passenger vessels from Selkirk, Man. Vessels making a round trip for Warren's Landing leave Selkirk Monday evening and connect with the river boat for Norway House. En route calls are made at Gull Harbour, Bull Head, Berens River, Grand Rapids and other intermediate points, returning to Selkirk the following Sunday morning. As on a trip of this nature there are no points at which water may be obtained from known safe shore sources it has been recommended that all water available for drinking and culinary purposes aboard vessels engaged in this tourist traffic should be chlorinated.

Subsection (*d*), section 9, of Part II of the Act of Parliament respecting the Department of Pensions and National Health, provides for the supervision, as regards the public health, of railways, boats, ships and all other methods of transportation. One of the most important matters which must receive attention under this heading is the drinking water supply, as the total number of passengers carried on Canadian railways in 1927 numbered 41,840,550.

As the opportunity offered itself an effort was made to observe existing sanitary conditions in railroad coachyards and the sanitary facilities and equipment used, particularly with reference to the handling of water and ice. Examinations were made of the water supplies available at various water filling points. Detailed reports were made and the railway officials concerned duly notified so that it is expected that improvements will be made soon, as there appears to be a decided interest taken in this matter by the officials of the principal railroads. In this connection work has been done in the United States in tests on dining car filters, water hydrants, water hose, etc.

That railway operators are catering more and more to the wishes of the travelling public and are providing additional facilities for comfort and safety is indicated in the recent appointment of a chief sanitary inspector by the Canadian National Railways. An important phase of this interest is concerned with the supply of safe drinking water on passenger coaches. It has been found that a water supply which may be satisfactory as furnished to the railroad hydrants, is contaminated readily in the process of filling the car tanks, unless adequate precautions are taken.

Assuming that the water supply used is of satisfactory quality and safety and is kept separate from the ice in the cooler, if the latter is clean and the water is delivered from the hydrant to the cooler without being contaminated, the travelling public should be assured of a good drinking water supply. But in actual practice the icing, cleaning and watering of coolers bring into effect the human equation, for which provision must always be made. Education and eternal vigilance are the factors of this equation as a function of public health vigilance.

The principal features of design of two satisfactory car water systems are as follows:—

(*a*) Air pressure system, underneath water storage tank of sufficient capacity to supply maximum needs (drinking, washing and toilet) of maximum number of passengers for longest run between watering points; filling pipe to tank—short section with quarter turn device for attaching water hose; cooler with water pipe connected to pipe from storage tank; pipe connections to wash basins and toilet hoppers.

(*b*) Gravity system, underneath filling pipes at each end of car on both sides, with quarter turn attachments enclosed in metal boxes; overhead storage tanks of sufficient capacity to supply maximum needs of maximum number of passengers for longest run between watering points; cooler with water pipe connected to pipe from storage tank; pipe connections to wash basins and toilet hoppers.

A study of the various water systems of railway cars would seem to indicate that both from the standpoint of public health, railway safety and economy, the gravity system and the pressure system having closed storage tanks which are filled from outside and underneath the cars afford the best protection from contamination of the water. It is preferable that the drinking water storage tanks be separate from all other water tanks on the car; but if water from certified sources of supply can be obtained at convenient intervals, there is no objection to a common storage tank for the entire water supply system aboard. The outside underneath connection on the car through which water is supplied

to the storage tank should be on the opposite side of the car from the toilet outlet, so that when the hose connections are made the danger of polluting the hose or pipe ends by toilet discharges may be minimized.

With the gravity or pressure system, the water compartment of a cooler should be entirely closed except for the inlet, the drain and the spigot connections. Coolers watered by a pail or hose from inside the car should have as small an opening to the water compartment as will accommodate the discharge nozzle of the filling device. To prevent insertion of the hose or the container nozzle into the water compartment, the opening to same should be obstructed by a coarse wire or a perforated plate. The cover to the funnel or filling attachment at the opening to the water compartment should be tight fitting, self closing and difficult for unauthorized persons to open.

Covers to water compartments should be fixed so that they can not be removed except for repair purposes.

The coolers should have separate inlets to the ice and water compartments. Where a common entrance is provided, as on many of the old type two-compartment coolers, ice is frequently placed in both compartments, either through intent or in error. A door in front for icing and a small opening at the top for watering are simple and convenient arrangements for coolers supplied by pail or hose from inside the car. Icing from overhead is dangerous and expensive.

Both the water and ice compartments of coolers should be equipped with drains of sufficient size to insure rapid draining when the compartments are flushed and rinsed weekly. Obviously drains should be at the bottom of the compartments, and valves to same should be conveniently accessible. The spigot in the front of a cooler is not adequate for draining purposes. With intermittent discharging of melted ice water instead of the continuous drip, the opportunity for the formation of icicles on the discharge line under the car, which may clog it, is lessened.

Steaming coolers is considered desirable by railroad officials to remove matter deposited from water which adheres to the inner surfaces. Formerly, rags, brushes and soap were used in cleansing the coolers, but that practice did more harm than good for filth was introduced by these articles. For effective steaming—that is removing the undesirable matter and sterilizing the cooler—contact of at least three minutes and preferably five minutes duration is desirable.

It is recommended that, before contracts are let for water coolers, blueprints showing the proposed design of same be submitted to the Department of National Health for review as is the practice with regard to water systems for vessels.

With the installation of separate compartments for ice and water in coolers, the only ice that comes into contact with water is that furnished for dining car table use. Ice also comes into contact with food in dining cars. For these reasons, it is still necessary to supervise the cleanliness and handling of ice. The recent developments in electrical refrigeration open a way whereby the contamination due to ice may be reduced. The Chicago, Milwaukee, St. Paul and Pacific Railroad has already installed electrical refrigerators on several dining cars and several other American railroads are reported to be investigating the application of electrical refrigeration for dining cars. However, as it will take many years to install electrical refrigerators on all dining cars, and many more to extend this policy to coaches, it will still be necessary to consider the methods of handling ice at railway stations and in coach yards.

The handling of ice used for cooling drinking water is an important public health matter. The method of cleansing ice adopted by one railway seems worthy of note. The ice is hauled to a steaming table, where it is first steamed all over and then rinsed. The steaming process melts the surface rapidly, but it removes small particles of dirt and filth embedded in the ice, which ordinary rinsing could not do.

The cost of supplying ice is no small item to the railroads, and therefore care in handling and storing it is necessary. In summer, the ice stored in roof tanks melts rapidly.

Many of the railroads filter dining car water so as to satisfy the demand of the travelling public to be served with clear sparkling water. Many of the filters in use are of composition stone and they are removed from their cases at intervals and scraped with a knife or emory stone, washed, and in some instances steamed, and then replaced. At present a satisfactory sanitary type of dining car filter is not available.

The location of water hydrants in coach yards is a feature that has been frequently overlooked. These hydrants are used principally to supply water for washing cars and for watering coolers. For safety purposes and to prevent freezing in winter it is necessary that these hydrants be as near the ground as possible. For health reasons it is desirable that these hydrants should be above ground, especially when they are located at the side of the tracks or platforms and are exposed to filth dropped from the cars. By locating the hydrants in the centre of the platform, near the ground and painting them white the demands of safety are met.

The probability that filth dropped from trains will pollute directly the threaded nipple of a hydrant to which the water hose coupling is attached and then contaminate the water passing through the hose is small; but when the routine movements of an employee watering tanks and coolers on trains are carefully noted, the danger of contaminating water delivered to the coaches from hydrants located on the ground, near the edge of platforms or along the side of the tracks is quite apparent.

In moving from train to train, in watering the cars, the hose is invariably dragged about the yard. The danger of dragging the ends of the hose through the filth in the coach yard is readily appreciated as is also the impossibility of washing off this filth by the ordinary rinsing process. Nevertheless, the free end of the hose is inserted into the drinking water supply tanks. Where hydrants are located along every other walk only the water hose is frequently thrown under cars to the next platform and thus exposed to filth between the tracks.

Another common practice in coachyards which is likely to result in the contamination of the drinking water in car coolers is the habit of dropping the free end of the hose to the ground while the other one is being attached to the hydrant. This dropping of the free end of the hose could be eliminated by the attachment of a strap loop to each end of the hose which the workman could slip over his arm.

That, since the regulations concerning water for drinking and culinary purposes on vessels navigating on the Great Lakes of Canada became effective, there has been a decided reduction in the number of typhoid fever patients put ashore from such vessels is very clearly indicated by the diagram showing the comparative number of typhoid fever cases on Canadian and United States vessels in Great Lakes traffic in the period 1920 to 1928.

Nowhere is there a more striking example of man's mastery over disease than in the conquest of typhoid fever. Forty years ago typhoid fever was regularly one of the ten leading causes of death. To-day the death rate from typhoid fever in the United States has been reduced to six per thousand.

In all up to date municipalities every drop of water delivered for household purposes from the local waterworks is made safe by scientific supervision.

As typhoid fever becomes more rare in the cities, vacation typhoid becomes relatively more important. At the present time the danger of contracting typhoid fever is much greater in rural districts than it is in urban communities so that it behooves vacationists to take care that their trips are a source of health and not of disease.

TYPHOID FEVER PATIENTS FROM GREAT LAKES STEAMSHIPS

Steamship	Owners	Number of cases reported	From where reported	Date	Remarks, Patient's Name, etc.
Assiniboia.....	Canadian Pacific Steamships..	1	Dr. C. N. Laurie, M.O.H., Fort William.	July 27	David Wright, deck hand. Drank water from sanitary system.
Islet Prince.....	Terminal Transit and Towing Co.	1	Dr. G. L. Sparks, M.O.H., Fort William.	July 31	Norman Smith, helper in refreshment booth.
James B. Foote.....	Union Transit Co.....	1	Montreal General Hospital.....	Aug. 2	W. Collins.
John B. Richards....	Eastern Steamship Co.....	1	Dr. D. V. Currie, M.O.H., St. Catharines.	Oct. 3	Fred Bevan.
Chicago Tribune.....	Chicago Tribune Transportation Co., Ltd.	1	Dr. Shultis, M.O.H., Pt. Colborne.....	Nov. 5	John Porter, member of crew.
Aura Lee.....	.....	1	Dr. H. W. Johnston, M.O.H., Sault Ste. Marie.	.....	Walter Duncanson, member of crew.

The number of persons that developed typhoid fever on Great Lakes steamships of Canadian ownership during the 1928 season of navigation was six.

In the corresponding interval reports of the United States Public Health Service show that eleven persons employed on Great Lakes vessels owned in the United States suffered from typhoid fever.

CASES OF TYPHOID FEVER REPORTED FROM GREAT LAKES PORTS.

Municipality	Year	Number of		Remarks, Increase, etc.
		Cases	Deaths	
Montreal	1928	.....	48	One from lake steamship.
	1927	5,131	592	Epidemic due to milk.
	1926	93	49	4 from ss. *Lake Gaither* of United States ownership.
	1925	140	52	5 directly from steamships.
	1924	150	51	
	1923	165	47	4 directly from steamships.
	1922	271	63	
	1921	187	62	
Kingston	1928	.....	.....	*None from lake vessels.*
	1927	.....	.....	*None from lake vessels.*
	1926	.....	.....	2 directly from steamships.
	1924	6	.....	All from outside of Kingston.
	1923	9	2	1 directly from steamships. 6 originated outside of Kingston.
	1922	A few	.....	Report of Dr. Williamson.
	1921	6	.....	" "
Oshawa	1925	1	.....	
	1923	8	.....	
	1921	6	.....	
Toronto	1928	32	.....	*None from lake steamships;* 26 originated outside of city.
	1927	.....	.....	4 from steamships.
	1926	.....	.....	3 from ss. *Lake Gathier*, of United States ownership.
	1925	43	9	21 contracted infection outside of city.
	1924	39	.....	29 originated outside of city.
	1923	85	.....	2 directly from steamships. 66 originated outside of city.
Hamilton	1928	.....	.....	*None from lake vessels.*
	1927	3	.....	Probably infected outside of the city.
	1926	1	.....	
	1925	18	.....	10 were infected outside of the city.
	1924	13	.....	6 from outside of the city.
	1923	13	4	9 cases infected outside of city.
	1922	21	1	
	1921	21	3	
St. Catharines	1928	.....	.....	1 from lake vessel.
	1927	.....	.....	1 from lake vessel.
	1923	13	2	1 from steamships, increase of 11.
	1922	2	1	
	1921	13	.....	All contracted outside of city.
Welland	1928	4	.....	1 from lake vessel.
	1927	.....	.....	
	1926	.....	.....	*None from vessels.*
	1925	20	5	8 originated outside of Welland.
	1924	19	.....	2 directly from steamships.
	1923	10	.....	3 directly from steamships.
	1922	14	.....	3 directly from steamships.
	1921	4	.....	
Chatham	1924	1	.....	1 case from lake steamship.
	1923	1	.....	
	1922	11	4	
Windsor	1928	10	.....	*None from steamships.*
	1927	.....	.....	1 from steamships.
	1926	.....	.....	2 directly from steamships.
	1925	.....	.....	
	1924	12	.....	1 directly from steamships.
	1923	24	.....	3 directly from steamships.
	1922	15	.....	3 directly from steamships.
	1921	.....	.....	1 from steamship.
Sarnia	1928	2	.....	*None from steamships.*
	1926	.....	.....	1 case from tug, Reid Wrecking Co.
	1925	6	.....	1 case from steamship *Sarnolite.*
	1924	10	2	None.
	1923	2	.....	Both being employees of vessel companies.
	1922	5	.....	4 directly from steamships.
	1921	4	.....	3 directly from steamships.

CASES OF TYPHOID FEVER REPORTED FROM GREAT LAKES PORTS—*Con.*

Municipality	Year	Number of		Remarks, Increase, etc.
		Cases	Deaths	
Collingwood.....	1928	.....	.....	*None from lake vessels.*
	1927	.....	.....	*None from lake vessels.*
	1926	.....	.....	1 from Great Lakes vessel.
	1925	.....	.....	*None from steamships.*
	1924	.....	.....	*None from steamships.*
	1923	1	.....	1 directly from vessels.
	1922	2	.....	2 from steamships.
Owen Sound.....	1928	.....	.....	*None from steamships.*
	1927	.....	.....	*None from steamships.*
	1926	.....	.....	
	1925	28	3	An epidemic of typhoid fever in the city. One from lake vessel.
	1924	8	.....	6 from steamships.
Midland.....	1928	.....	.....	2 from steamships.
	1925	.....	.....	2 cases from Great Lakes vessels.
	1924	2	.....	Both from Great Lakes steamships.
	1923	11	.....	Increase 10, 6 directly from steamships.
	1922	1	.....	1 from steamships.
	1921	3	.....	2 directly from steamships.
Parry Sound.....	1928	2	.....	*None from lake vessels.*
	1925	3	.....	
	1924	2	.....	These two cases infected outside of Parry Sound.
	1923	13	.....	This is for Parry Sound district, increase 3.
	1922	14	.....	
	1921	11	1	Very bad record. See report of Dr. E. George.
Sault Ste. Marie.....	1928	1	.....	*None from steamships.*
	1927	9	.....	*None from steamships.*
	1926	.....	.....	*None from steamships.*
	1925	3	.....	*None from steamships.*
	1924	1	.....	*None from steamships.* Decrease of 4.
	1923	5	.....	2 directly from steamships.
	1922	6	.....	Increase of 3, 2 from steamships.
	1921	3	.....	1 from steamships.
Port Arthur.....	1928	2	.....	Child on ss. *Glenbogie* and man from ss. *Assiniboia.*
	1927	.....	.....	*None from steamships.*
	1926	.....	.....	
	1925	.....	.....	
	1924	.....	.....	
	1923	7	.....	Increase 6, 4 originated outside of Port Arthur.
	1922	1	.....	
	1921	1	1	
Fort William.....	1928	2	.....	1 from ss. *Islet Prince.* 1 from ss. *H. H. Brown* owned in Cleveland, U.S.A.
	1927	.....	.....	1 from tug *Strathmore.*
	1924	3	.....	3 directly from steamships.
	1923	27	1	Increase 6, 11 directly from steamships.
	1922	21	1	Increase 11. Two directly from steamships.
	1921	10	1	3 directly from steamships.

TYPHOID STATISTICS—TYPHOID FEVER CASES REPORTED

Province	Year	Totals		Increases		Remarks
		Cases	Deaths	Cases	Deaths	
Nova Scotia	1928	122	23	65	.....	Increase over 1927.
	1927	57	.....	.....	.....	
	1926	43	16	.....	.....	
	1925	91	24	.....	3	There was a total of 193 from enteritis and diarrhoea in 1925.
	1924	123	24	10	.....	
	1923	113	33	.....	.....	
New Brunswick	1928	359	30	118	2	Epidemic in Madawaska.
	1927	241	28	118	8	
	1926	123	20	.....	.....	
	1925	187	17	.....	.....	
	1924	233	18	.....	.....	
	1923	402	28	.....	.....	
Quebec	1928	1,125	.....	.....	.....	Montreal epidemic, typhoid and paratyphoid, 1927.
	1927	5,866	869	.....	.....	
	1926	.....	256	.....	.....	Increase.
	1925	.....	236	.....	.....	
	1924–25	562	316	.....	.....	
	1923–24	893	334	60	.....	Epidemic at St. Jerome.
	1922–23	833	326	.....	.....	
Ontario	1927	753	.....	172	.....	
	1926	581	77	278	7	Decrease.
	1925	859	70	.....	.....	Outbreak at Courtright and Owen Sound.
	1924	833	76	.....	.....	Port Colborne epidemic.
	1923	1,663	212	1,087	85	Cochrane epidemic.
	1922	576	127	.....	.....	
Manitoba	1927	108	.....	.....	.....	
	1926	128	18	.....	.....	
	1925	.....	23	.....	.....	
	1924	81	20	.....	.....	
	1923	110	24	.....	.....	
	1920	192	.....	.....	.....	
Winnipeg city	1927	27	6	.....	.....	8 received infection outside of the city.
	1926	66	8	.....	.....	13 while travelling outside of city.
	1925	42	6	.....	.....	9 contracted disease while travelling.
	1924	36	6	10	.....	15 persons contracted typhoid while outside city, 1923.
	1923	36	5	.....	.....	
Saskatchewan	1927	91	21	.....	.....	
	1926	115	30	.....	.....	
	1925	223	39	140	2	
	1924	83	37	68	26	Decrease.
	1923	151	63	.....	.....	
	1922	249	71	66	.....	Increase over 1921.
Alberta	1927	91	21	.....	.....	Typhoid and paratyphoid.
	1926	115	30	.....	.....	
	1925	127	39	.....	.....	
	1924	98	37	.....	.....	
	1923	155	36	.....	.....	
	1922	169	50	.....	.....	
Edmonton	1927	21	6	11	.....	17 patients from outside of city. Five of these died.
	1926	10	0	.....	.....	
	1925	17	0	.....	.....	
British Columbia	1927–28	67	13	.....	.....	
	1926	64	15	45	.....	Decrease of 45.
	1925	109	13	.....	.....	
	1924	109	15	30	.....	
	1923	79	12	.....	.....	

MARINE HOSPITALS SERVICE

The Marine Hospitals Service is operated in conformity with the provisions of Part V of the Canada Shipping Act (Sick and Distressed Mariners), chapter 186, R.S. 1927. All sick or injured mariners belonging to vessels that have paid the sick mariners' dues for the current calendar year are entitled to gratuitous treatment, if sent to a designated hospital or port physician in the provinces of Quebec, Nova Scotia, New Brunswick, Prince Edward Island or British Columbia, with a written recommendation from the master or person in command of the ship, endorsed as approved by the collector of customs.

The department operates two marine hospitals for the care and treatment of sick mariners, one at Sydney, N.S., and the other at Lunenburg, N.S. At other ports provision is made, as far as possible, for their care and treatment at contract rates at various local hospitals. Where there is no marine or designated hospital the collector sends the sick mariner to a port physician for medical or surgical assistance, and such other treatment as the case requires. When considered necessary, the sick mariner may be sent to the nearest public hospital, if there is one at convenient distance; if not, he may be sent to some public or private boarding house.

The following is a list of the hospitals which were under contract with the department during the past fiscal year:—

NOVA SCOTIA

Amherst	Highland View Hospital.
Antigonish	St. Martha's Hospital.
Bridgewater	Dawson Memorial Hospital.
Glace Bay	St. Joseph's Hospital.
Halifax	Victoria General Hospital. City Health Board (Contagious Diseases). Tuberculosis Hospital.
Kentville	Nova Scotia Sanatorium (Tuberculosis).
Middleton	Soldiers' Memorial Hospital.
New Glasgow	Aberdeen Hospital.
North Sydney	Hamilton Memorial Hospital.
Pictou	Pictou Cottage Hospital.
Springhill	Springhill Cottage Hospital.
Windsor	Payzant Memorial Hospital.
Yarmouth	Yarmouth Hospital. Clinic Infirmary.

NEW BRUNSWICK

Bathurst	James H. Dunn Hospital.
Campbellton	Hôtel-Dieu.
Chatham	Hôtel-Dieu.
Moncton	Moncton Hospital.
River Glade	Jordan Memorial Sanatorium (Tuberculosis).
St. John	General Public Hospital. St. John County Hospital (Tuberculosis).
St. Stephen	Chipman Memorial Hospital.
Tracadie	Hôtel-Dieu.

PRINCE EDWARD ISLAND

Charlottetown	Charlottetown Hospital. Prince Edward Island Hospital.
Summerside	Prince County Hospital.

QUEBEC

Chicoutimi	Hôtel-Dieu.
Lachine	General Hospital.
Lake Edward	Lake Edward Sanatorium (Tuberculosis).

QUEBEC—*Concluded*

Levis	Hôtel-Dieu.
Montreal	Montreal General.
	Notre Dame.
	Hôtel-Dieu.
	Royal Victoria.
	St. Luke's.
	St. Paul's (Contagious diseases).
	Alexandra (Contagious diseases).
	Grace Dart Home (Tuberculosis).
	St. Mary's.
	Convalescent Home.
Quebec	Hôtel-Dieu.
	Jeffery Hale's.
	Civic Hospital (Contagious diseases).
	Laval Hospital (Tuberculosis).
Sorel	Hôpital général.
Sainte-Agathe-des-Monts	Laurentian Sanatorium (Tuberculosis).
Saint-Jean	Hôpital Saint-Jean.
Three Rivers	Hôpital Saint-Joseph.

BRITISH COLUMBIA

Anyox	Anyox General Hospital.
Alert Bay	St. George's Hospital.
Bella Bella	R. W. Large Memorial Hospital.
Chemainus	Chemainus General Hospital.
Cumberland	General Hospital.
Duncan	King's Daughters' Hospital.
Ladysmith	General Hospital.
Nanaimo	Nanaimo Hospital.
New Westminster	St. Mary's Hospital.
Ocean Falls	Ocean Falls Hospital.
Port Alberni	West Coast General Hospital.
Powell River	St. Luke's Hospital.
Prince Rupert	General Hospital.
Tranquille	Tranquille Sanatorium (Tuberculosis).
Vancouver	St. Paul's Hospital.
Victoria	St. Joseph's Hospital.
	Provincial Royal Jubilee Hospital.
	City Isolation Hospital (Contagious diseases).

Emergency hospitals were operated at the following ports:—

Nova Scotia.—Arichat, Canso, Liverpool, Lockport, Louisburg, and Shelburne.

Prince Edward Island.—Souris.

Quebec.—Port Alfred.

With certain exceptions, a duty of 2 cents for every ton which a ship measures, registered tonnage, is levied, not more than three times during each calendar year, on every ship arriving at any port in the provinces mentioned from any place out of Canada or from a port in another province.

The net amount of the sick mariners' dues collected during the fiscal year was $236,807.95, and the expenditure incurred, not including, however, the cost of administration, was $222,094.67.

Sick mariners' dues were collected from 3,419 vessels, the 98,675 employees on those vessels being entitled to gratuitous treatment for sickness or injury for an average per capita cost of $2.25.

The total number of sick mariners treated during the fiscal year was 5,751, and the number of days of hospital treatment 53,079.

QUARANTINE SERVICE

The organized quarantine stations of Canada are:—

Province of Quebec.—Grosse Isle in the river St. Lawrence, with Father Point as the inspecting base, and Quebec and Montreal Harbours as substations.

Province of Nova Scotia.—Halifax, the Harbour and Lawlor's Island.

Province of New Brunswick.—St. John, the Harbour and Partridge Island.

Province of British Columbia.—William Head, with Victoria, Esquimalt, Vancouver (including all of Burrard Inlet), New Westminster, and their respective harbours, as substations.

Each organized quarantine station is in charge of a medical quarantine officer.

A substation is a port of final destination to which vessels may go after procuring pratique at an organized quarantine station, and where, following discharge of cargo, they can with greater facility be fumigated or disinfested, and where other functions may, when required, be performed, as directed by the department.

Each substation is in charge of the chief or senior immigration medical officer, except when otherwise provided by the department.

UNORGANIZED QUARANTINE STATIONS

Every maritime port in Canada, other than those mentioned above, is designated an unorganized maritime quarantine station.

Every inland port on the Canadian frontier is designated an unorganized inland quarantine station.

At each unorganized maritime or inland quarantine station, the local customs officer is, *ex officio*, the quarantine officer for the purposes of these Regulations.

The Governor in Council may, however, from time to time when circumstances warrant it, appoint a temporary medical quarantine officer at any unorganized maritime or inland quarantine station, who shall supersede for the time being the customs officer as the quarantine officer of such port.

QUARANTINABLE DISEASES

The quarantinable diseases are:—

(*a*) Cholera (Asiatic).
(*b*) Plague.
(*c*) Smallpox.
(*d*) Typhus fever.
(*e*) Yellow fever.

OTHER CONTAGIOUS OR INFECTIOUS DISEASES

Persons sick with other infectious or contagious diseases such as chickenpox, diphtheria, enteric fever, erysipelas, influenza, measles, scarlet fever, etc., are taken care of at quarantine stations only when proper facilities do not exist for their treatment at the port where such cases are to be landed.

LEPROSY

Under the Quarantine Regulations of Canada, it is the duty of a quarantine officer to satisfy himself by the presence or absence of obvious signs, whether or not leprosy exists among the passengers or crew on board a vessel arriving at a Canadian port. In the event of this disease being found, the person affected would not be allowed to enter the country, but would be detained in quarantine

at the vessel's expense until taken aboard by the same vessel when next outward bound, unless satisfactory reasons be given for further delay. In the event of the vessel failing to take back the said leper, he or she would be deported by the department at the expense of the owners of such vessel.

The following tabulation indicates the number of vessels and personnel inspected at the organized quarantine stations:—

Station	Vessels inspected	Passengers				Crews	Cattlemen, stowaways, distressed seamen, etc.	Total personnel inspected
		First class	Cabin class	Tourist third	Third class and steerage			
Father Point, P.Q.	1,234	4,788	22,104	24,571	77,647	102,102	157	231,369
Halifax, N.S.	586	2,079	25,127	9,644	87,810	79,017	58	203,735
St. John, N.B.	349	2,338	110	2,052	12,634	22,371	582	40,087
William Head, B.C.	1,068	6,033	2,743	.....	16,396	65,628	20	90,820
Total	3,237	15,238	50,084	36,267	194,487	269,118	817	566,011

Persons to the number of 481 were detained in quarantine. Of these, 78 were hospitalized on account of sickness; the remainder, numbering 403, were either contacts under observation or members of families accompanying those in hospital. The following table shows the distribution by stations:—

Quarantine Station	Sick	Hospital days	Contacts and persons accompanying sick	Detention period in days	Total persons detained	Total days in hospital and detention quarters
Grosse Isle, P.Q.	.....	.....	.....	.....	.....	.....
Lawlor's Island, N.S.	2	25	3	9	5	34
Partridge Island, N.B.	50	1,277	51	1,332	101	2,609
William Head, B.C.	26	305	349	2,941	375	3,246
Total	78	1,607	403	4,282	481	5,889

The following table shows the distribution in hospital and detention buildings, by diseases:—

Final diagnosis	Sick	Hospital days	Contacts and persons accompanying sick	Detention period in days	Total persons detained	Total days in hospital and detention quarters
Bronchitis	1	23	.....	.....	1	23
Chickenpox	2	10	8	40	10	50
Cold	2	16	1	29	3	45
Erysipelas	3	41	.....	.....	3	41
Influenza	2	18	.....	.....	2	18
Influenzal-pneumonia	†18	102	300	2,570	318	2,672
Measles	31	858	33	822	64	1,680
Mumps	2	31	2	36	4	67
Observation, pyrexia	1	2	1	2	2	4
Refusing vaccination	2	8	1	4	3	12
Scarlet fever	*6	288	5	399	11	687
Smallpox	5	182	49	371	54	553
Syphilis	1	3	.....	.....	1	3
Varioloid	2	25	3	9	5	34
Total	78	1,607	403	4,282	481	5,889

†2 deaths. *1 death.

FUMIGATION OF SHIPS

In accordance with article 28 of the International Sanitary Convention, 1926, to which Canada is a signatory, and by authority of section 44 of the Canadian Quarantine Regulations, all ships arriving at ports of Canada, except coasting vessels, are subject to periodical fumigation for the destruction of rats. When, upon inspection, ships are found to be permanently so maintained as to keep the rat population down to a minimum, the department has authority, under the regulations, to issue deratization exemption certificates in certain cases.

Facilities for the fumigating of ships now exist in Canada at the ports of Halifax and North Sydney, Nova Scotia; St. John, New Brunswick; Chicoutimi, Port Alfred, Three Rivers, Quebec and Montreal, province of Quebec; Vancouver, New Westminster, Prince Rupert, Victoria, Esquimalt, William Head, Chemainus, Nanaimo, Comox and Port Alberni, British Columbia.

The following table summarizes the work done at the respective ports:—

Port	Vessels fumigated with		Deratization certificates issued	Dead rats recovered	Deratization exemption certificates issued
	Cyanide	Sulphur			
Halifax, N.S.	26	.....	26	54	13
North Sydney, N.S.	.....	8	8	2	.....
St. John, N.B.	.....	12	12	53	8
Chicoutimi, P.Q.	.....	1	1	.....	.....
Port Alfred, P.Q.	.....	6	6	19	.....
Three Rivers, P.Q.	.....	1	1	.....	.....
Quebec, P.Q.	.....	7	7	15	.....
Montreal, P.Q.	149	.....	149	1,795	61
Vancouver, B.C.	145	23	168	438	.....
Prince Rupert, B.C.	.....	2	2	25	.....
William Head, B.C.	1	2	3	.....	.....
Esquimalt, B.C.	1	.....	1	3	.....
Victoria, B.C.	1	.....	1	.....	.....
Total	323	62	385	2,404	82

The following extracts are from reports received from the respective quarantine officers:—

St. Lawrence River Quarantine Service: Medical Superintendent, Dr. G. E. Martineau.

"There were 1,234 vessels cleared during the season (April to November), of which three were cleared at Quebec and the balance at Father Point; this being an increase of seventy-five compared with last year and more than ever cleared during any previous season.

"Of the vessels cleared, 210 were passenger vessels (17 per cent of vessels cleared) being thirty-six more of this class of vessel than last year.

Infectious, contagious or other disease was reported on 122 different vessels on as many voyages. These included all the minor infectious diseases and cases of pyrexia where the disease had not sufficiently developed to make a postive diagnosis. Other non-infectious cases were noted and reported. Every passenger vessel and many freighters had cases on board on one or more occasions. There were no cases of any of the major quarantinable disease during this season.

"On many occasions persons requiring vaccination under the regulations were vaccinated by our quarantine medical officers. On nine different occasions twenty-one persons refused to be vaccinated and were sent on to Quebec for the necessary period of detention at the hospital there.

"Deaths were reported on ten vessels as follows: *Canadian Mariner*, heart failure; *Ascania*, uraemia; *Canadian Beaver*, cause unknown; *Laurentic*, heart failure; *Arno Mendi*, aneurism; *Wanstead*, heart disease; *Slotlaan*, suicide; *Dreibergen*, strangulated hernia; *Montclare*, apoplexy; *Fanad Head*, accident.

"Births were reported on two vessels, the *Montroyal*, June 17, and *Aurania*, September 14."

Lawlor's Island, Halifax, N.S.: Quarantine Officer, Dr. J. V. Graham.

"During the fiscal year two ships arrived with varioloid among the passengers, the ss.*Andania*, arriving on February 24, and the ss. *Doric*, on March 31. These cases together with contacts were landed at the quarantine station.

"There were 1,011 vaccinations of passengers and crew performed at this station during the year, occasioned by the two vessels bringing smallpox referred to above.

"There were twenty-six vessels fumigated at this station during the year. On four of them fifty-one dead rats were recovered after fumigation, one of the four having produced 41 dead rats, and on two of them eighty-three dead mice were recovered."

William Head, B.C.: Quarantine Officer, Dr. C. P. Brown.

"*Boarding Division.*—The total number of vessels inspected, 1,068, shows an increase of 20 per cent over the previous year. This increase has largely been in vessels of British and Japanese registry. Vessels of British registry make up 41 per cent of the total. Passengers inspected have decreased 4·7 per cent from last year, while crews have increased 15·9 per cent. The Orient still supplies 39 per cent of our traffic.

"Disease in the Orient has been very serious this past winter. We have had three vessels from Shanghai with smallpox. In addition, one case of smallpox developed at Vancouver—the chief engineer of a British freighter. This vessel passed here with the crew in good health: the patient had his first symptoms on the seventeenth day out from Yokohama, and was not diagnosed until the twentieth day.

"Epidemic cerebro-spinal meningitis has been prevalent among Filipino steerage passengers from Manila for the last two months. Outbreaks of this disease occurred on board three vessels of the American Mail Line calling at this station. As there was no disease among the few Chinese and Japanese Canadian steerage the vessels were allowed to dock at Victoria and discharge passengers and freight on condition that the Filipino steerage was confined to quarters, while the vessel was in port, and not allowed to have any communication with longshoremen or others.

"The outbreaks of meningitis on these vessels were explosive in character, a number of passengers becoming ill during the last day before arrival, all at first with symptoms of 'flu'.

"There is none of the disease known at Manila where these passengers embark. It has been reported in small numbers at Hong Kong, Shanghai, Kobe and Yokohama during the winter, and has broken out in a very serious epidemic at Shanghai recently. These passengers may have become infected on board ship by carriers among the Oriental stewards.

"The Canadian Pacific vessels also carry Filipino steerage passengers: so far they have not brought any meningitis. The *Empress of Russia* had influenzal pneumonia among the same class of steerage, necessitating landing the Filipino steerage along with attendants, a total of 318 persons. Altogether, to the end of March, we had eighteen patients in hospital and two deaths. Two more died early in April. Careful bacteriological as well as clinical examination showed no evidence of meningitis. It appeared to be a severe type of influenzal pneumonia.

"During the year bubonic plague was reported from ports, on the south shore of the Mediterranean, the Azores, both coasts of South America, the Straits Settlements and Hong Kong.

"Typhus was reported from southern Mediterranean ports, gulf of Mexico, Hong Kong and Dairen.

"Cholera was reported from Singapore, Canton, Shanghai and Osaka.

"Yellow fever occurred at Rio de Janeiro, Bahia and Para.

"Smallpox has been widespread, especially bad at Shanghai.

Detention Division.—Detentions totalled 375 for the year.

"There were two deaths among the Filipino steerage. Smallpox was of a very virulent type although there were no deaths.

"*Fumigation Division.*—Total vessels fumigated were 175.

"During the fiscal year cyanide fumigation by the Zyklon B method was instituted at this station. Seventeen vessels were ordered fumigation as coming from infected ports. All rats found and examined were negative for plague.

"*Laboratory Division.*—The laboratory was kept ready for use throughout the year. In addition to the routine work of the station and leper lazaretto, it was put to most intensive service in March.

"Nasopharyngeal cultures for meningococcus were made on all the detentions from the *Empress of Russia.* The patients in hospital were thoroughly examined—spinal fluids, blood cultures, etc.—to ascertain the cause of the illness and to rule out meningitis. The predominating organism in both throat and blood cultures was a streptopneumococcus. All spinal fluids were sterile."

Montreal, P.Q.: Medical Officer in charge, Dr. G. E. Beauchamp.

"The inspection and the fumigation of ships was carried out in accordance with departmental instructions.

"According to the Montreal Harbour Commission by-laws promulgated in December, 1927, all vessels arriving at Montreal in ballast with fumigation order from the quarantine officer at Father Point had to drop anchor amid-stream at Longue Pointe to be inspected and fumigated there before being permitted to proceed to the harbour. The inspection and fumigation of those ships were made during the navigation season with the yacht *Jeannette.* As regards loaded vessels coming with a fumigation order from Father Point, they were inspected and fumigated at their berths in the harbour. In order to be able to fumigate ships at Longue Pointe without any delay, it was necessary to have a store for the material and the equipment. Arrangements were made with the Montreal Harbour Commission for the construction of a small storage shanty in that vicinity, accordingly. The warehouse in the Harbour Commission Hospital building, foot of Berri street, was also used as a central store from whence material and equipment were taken for fumigations in the harbour. The Harbour Commission have also built a floating dock for the yacht."

Vancouver, B.C.: Medical Officer in charge, Dr. C. Cartwright.

"During the past twelve months we have been using *Zyklon B* almost exclusively, and both fumigating companies here and myself are satisfied as to its efficiency.

"Also we have had very favourable comments made to us by a number of ships' officers, especially in regard to the way in which it cleans up cockroaches, bed bugs, and other insects.

"The new Q.S. forms No. 42 have now been in use long enough for me to say that they are of real assistance in educating the crews of the ships as to the necessity for shaking out their bedding and airing it after fumigation.

"The Q.S. forms No. 43 have also helped considerably in speeding up the work, as ships are coming in better prepared than formerly, thus avoiding delay.

"There has been a falling-off in the number of Japanese freighters fumigated here during the past twelve months, only three of these ships being done here as against ten in 1927-8. The Japanese vessels carrying passengers, however, are about the same in number as before.

"The total number of ships fumigated in this port during the past twelve months was 168. Of this number ninety-three were remanded and seventy-five done by request.

"Ships fumigated were from the following parts of the world:—

From the Orient	74
From North America	28
From Central and South America	13
From Europe	42
From Africa	2
From Australasia	11
Number fumigated with sulphur only	23
Number fumigated with sulphur and cyanide	11
Number fumigated with cyanide only	134
Total number of rats recovered	438
Total number of mice recovered (on five ships)	117
Rats found on ships done by request	125
Rats found on ships remanded	313
Rats found after sulphur fumigation	13
Rats found after cyanide fumigation	425

"We have only found rats on two oil burning vessels and in both cases they were recovered from the storerooms.

"Rat guarding regulations here are being well enforced."

LEPER STATIONS

By authority of the Leprosy Act (R.S. 1927, c. 136), the department administers two leper colonies, one at Tracadie, N.B., the other at Bentinck Island, B.C. *Tracadie, N.B.:* Medical Superintendent, Dr. J. A. Langis.

At the close of the fiscal year there were eight patients in this institution—five French Acadians, one French and Scotch origin, one Russian, and one Chinese. One patient died during the year, and there was one new admission. Three of the patients show clinical signs of active leprosy; the other five are considered to be arrested cases.

The following table furnishes particulars of the respective patients:—

Patient	Age	Sex	Date admitted	Nationality	Where from
P. D.	42	M.	May, 1909	French Acadian	Lameque, N.B.
B. T.	78	F.	October, 1914	French Acadian	Portage River, N.B.
A. D.	30	F.	July, 1918	French Acadian	Lameque, N.B.
J. D.	67	M.	April, 1919	French Acadian	Lameque, N.B.
V. de L.	29	F.	January, 1921	Scotch and French descent	Toronto, Ont.
K. S. J.	47	M.	October, 1922	Chinese	Montreal, Que.
J. P.	35	F.	November, 1926	Russian	Blaine Lake, Sask.
P. P.	85	M.	July, 1928	French Canadian	Neguac, N.B.

The medicinal treatment consists of the ethyl esters of chaulmoogra oil, supplemented by "Hyrganol Iode," a French preparation. In this connection, Dr. Langis reports:—

"In November, 1928, we tried the oral administration of an emulsion, in acacia and simple syrup, of equal parts of the mixed esters of chaulmoogra oil and cod-liver oil, to which iodine is added, to make six one-hundredths per cents. This was published in the Public Health Reports of the United States Public Health Service, November 2, 1928, by Drs. Wayson and Badger. Notwithstanding our great desire to give the preparation a fair trial and with our

patients' sincere co-operation, they could take only a few doses, preferring the pricking of the needle (both being given simultaneously) to the nauseating effect of the oral use of the above compound."

Dr. Langis concludes his report by paying tribute to the nursing sisters of the Order of St. Joseph, for their devoted service to the leper patients.

Bentinck Island, B.C.: Medical Officer in charge, Dr. C. P. Brown.

At the close of the fiscal year there were twelve patients in this institution, all males, this number being one more than in the previous year. One patient was returned to China as non-infectious, and there were two new admissions.

Dr. Brown reports that medicinal treatment was carried on along approved lines. One obstinate skin case, that was definitely retrogressing under usual treatment, improved with capsules of parathyroid and calcium. All patients except two showed nasal smears positive for B. Leprae at some time during the year. Six are improving; four show no change; and the condition of the remaining two is definitely retrogressing.

The table below furnishes particulars of the respective patients:—

Patient	Age	Date admitted	Nationality	Where from
F. H.	43	August, 1916	Chinese	Victoria.
C. K. W.	44	October, 1918	Chinese	Vancouver.
L. A.	33	November, 1918	Chinese	Victoria.
L. B.	38	December, 1921	Chinese	Vancouver.
C. K.	49	March, 1922	Chinese	Saanich, B.C.
L. J.	34	August, 1923	Chinese	Vancouver.
E. D.	36	January, 1924	Doukhobor	Verigin, Sask.
M. J.	32	May, 1924	Chinese	Vancouver.
W. K. D.	44	October, 1925	Chinese	Nanaimo, B.C.
W. H. F.	27	October, 1927	Chinese	Vancouver, B.C.
C. W.	42	August, 1928	Chinese	Nanaimo, B.C.
L. C.	81	March, 1929	Chinese	Vancouver, B.C.

IMMIGRATION MEDICAL SERVICE

Section 3 of the Immigration Act of Canada provides that no immigrant, passenger, or other person, unless he is a Canadian citizen or has Canadian domicile, shall be permitted to enter or land in Canada who belongs to any of the "prohibited classes" enumerated below:

1. *Mentally Defective Persons.*

Subsection (*a*) of section 3 prohibits the landing in Canada of "idiots, imbeciles, feeble-minded persons, epileptics, insane persons and persons who have been insane at any time previously".

2. *Loathsome and Dangerous Contagious Diseases.*

Subsection (*b*) of section 3 places in the prohibited classes: "Persons afflicted with (*a*) tuberculosis in any form or with (*b*) any loathsome disease, or with (*c*) a disease which is contagious or infectious, or (*d*) which may become dangerous to the public health, whether such persons intend to settle in Canada or only pass through Canada in transit to some other country; provided that if such disease is one which is curable within a reasonably short time, such persons may, subject to the regulations in that behalf, if any, be

permitted to remain on board ship if hospital facilities do not exist on shore, or to leave ship for medical treatment."

3. *Physically Defective Persons.*

Subsection (*c*) of section 3 places in the prohibited classes: "Immigrants who are dumb, blind, or otherwise physically defective, unless in the opinion of an Immigration Department board of inquiry, or officer acting as such, they have sufficient money, or have such profession, occupation, trade, employment or other legitimate mode of earning a living that they are not liable to become a public charge, or unless they belong to a family accompanying them or already in Canada, and which gives security satisfactory to the Minister against such immigrants becoming public charges."

4. *Constitutional Psychopathic Inferiority.*

Subsection (*k*) of section 3 prohibits the entrance of "persons of constitutional psychopathic inferiority".

"5. *Chronic Alcoholism.*

Subsection (*l*) of section 3 prohibits the entrance of "persons with chronic alcoholism".

"6. *Minor Mental or Physical Defects.*

Subsection (*m*) of section 3 prohibits the entrance of: "Persons not included within any of the foregoing prohibited classes who, upon examination by a medical officer, are certified as being mentally or physically defective to such a degree as to affect their ability to earn a living."

IMMIGRATION MEDICAL SERVICE OVERSEAS

Prospective emigrants to Canada from the British Isles and countries of Europe are required to undergo medical examination before obtaining permission to come forward. This examination is conducted by Canadian doctors employed by the department. In the British Isles, in addition to the Canadian medical officers stationed at key centres, examinations may be performed by British doctors selected by the department from an official roster. This facilitates the work particularly in the towns and rural centres.

Examination centres in charge of Canadian medical officers existed during the fiscal year at the following cities:—

England: London,
Liverpool,
Bristol,
Birmingham,
York,
Newcastle.

Scotland: Glasgow,
Aberdeen.

Ireland: Belfast,
Londonderry,
Cork.

Wales: Cardiff.

France: Paris.

Belgium: Antwerp.

Holland: Rotterdam.

Germany: Hamburg.

Poland: Danzig.

Latvia: Riga.

Immigrants coming direct to Canada from the Scandinavian countries of Norway, Sweden, and Denmark, are medically examined on arrival at the Canadian ports for the reason that neither Canadian immigration agents nor Canadian medical officers are stationed in these countries.

Whereas it is the task of officers of the Canadian Immigration Medical Service overseas and at ports of Canada to diagnose the mental and physical condition of prospective immigrants, and to assess their rating under Section 3 of the Canadian Immigration Act, decision as to their acceptance or rejection rests with the Department of Immigration. Medical Officers of the Department of Pensions and National Health act merely in an advisory capacity.

MEDICAL EXAMINATIONS CONDUCTED IN GREAT BRITAIN AND EUROPE

BRITISH

Month	Men	Women	Children	Totals
1928—				
April	3,680	1,959	2,212	7,851
May	3,378	1,939	2,122	7,439
June	2,227	1,629	1,432	5,288
July	2,058	1,477	1,244	4,779
August	18,370	1,554	1,109	21,033*
September	932	1,445	995	3,372
October	904	1,132	811	2,847
November	1,156	891	908	2,955
December	1,456	629	597	2,682
1929—				
January	3,266	1,452	1,842	6,560
February	5,169	2,007	2,517	9,693
March	5,680	2,637	3,057	11,374
Totals	48,276	18,751	18,846	85,873

*Includes British harvester movement.

CONTINENTALS

1928—				
April	10,213	1,593	968	12,774
May	7,052	1,721	1,293	10,066
June	5,016	1,646	1,214	7,876
July	7,202	2,326	1,673	11,201
August	3,219	1,042	1,013	5,274
September	610	724	646	1,980
October	715	936	869	2,520
November	659	897	822	2,378
December	440	563	457	1,460
1929—				
January	588	497	359	1,444
February	1,611	516	449	2,576
March	6,817	1,292	1,127	9,236
Totals	44,142	13,753	10,890	68,785

Grand Total 154,658

Of this total of 154,658 medically examined, 15,232 were medically certified as "prohibited" for the reasons set forth in the following table:—

PROSPECTIVE IMMIGRANTS MEDICALLY EXAMINED PRIOR TO EMBARKATION AND CERTIFIED AS "PROHIBITED" UNDER SECTION 3 OF THE IMMIGRATION ACT

—	Britishers	Continentals	Totals
Section 3, ss. *(a)*— Mental diseases or defects	726	46	772
Section 3, ss. *(b)*— Loathsome or contagious disease, including tuberculosis and trachoma	277	997	1,274
Section 3, ss. *(c)*— Physical defects rendering persons liable to become a public charge	10,121	1,849	11,970
Section 3, ss. *(k)*— Constitutional psychopathic inferiority	284	52	336
Section 3, ss. *(l)*— Chronic alcoholism	11	2	13
Section 3, ss. *(m)*— Minor mental or physical defects, affecting ability to earn a living	706	161	867
Total certified	12,123	3,207	15,232

IMMIGRATION MEDICAL SERVICE IN CANADA REPORTS FROM CANADIAN PORTS

Those immigrants who on arrival in Canada fail to produce evidence that they were medically examined and passed prior to embarkation are subjected to a thorough medical examination on this side. Those holding cards of identity showing that they have been passed by the Canadian overseas medical staff, including those certified cases whose emigration has been approved by the Department of Immigration, are not subjected to medical examination on arrival. When, however, symptoms are apparent indicative of pathological conditions, which may have developed since they were originally examined (the examination may have taken place within four months previous to embarkation) a further medical examination is required.

The following table shows the monthly arrivals at Canadian ocean ports, according to figures supplied by the Department of Immigration:—

Fiscal year 1928-29	Quebec	Halifax	St. John	Sydney	North Sydney	Montreal	Vancouver	Victoria	Monthly totals
April	7,599	11,501	5,108	1	93	12	434	145	24,893
May	16,444	4,576	73	1	172	92	688	154	22,200
June	14,883	3,476	38	.....	133	103	474	179	19,286
July	10,659	3,061	73	.....	119	77	271	112	14,372
August	16,621	6,190	36	.....	217	107	294	101	23,566
September	8,377	1,487	25	.....	125	63	203	50	10,330
October	4,427	1,279	22	5	147	59	106	41	6,086
November	3,633	1,215	18	1	140	41	160	35	5,243
December	11	2,510	1,648	.....	68	6	88	20	4,351
January	16	1,593	983	3	39	1	97	28	2,760
February	5	1,982	1,130	8	51	1	72	37	3,286
March	8	7,464	4,583	.....	62	1	462	79	12,659
Port totals	82,683	46,334	13,737	19	1,366	563	3,349	981	149,032

The following table shows the number of persons who, on arrival at Canadian ports of entry, were medically certified as "prohibited":—

Ocean ports	Insane, feeble-minded epileptic, etc. Section 3 *(a)*	Tuberculosis, loathsome or chronic infectious disease Section 3 *(b)*	Physically defective—liable to become a public charge Section 3 *(c)*	Constitutional psychopathic inferiority Section 3 *(k)*	Chronic alcoholism Section 3 *(l)*	Minor physical or mental defects—affecting ability to earn a living Section 3 *(m)*	Totals
Quebec	5	13	37	6	1	3	65
Halifax	2	12	146	4	.....	2	166
St. John	2	1	3	.....	.....	.....	6
Montreal	.....	5	4	.....	.....	4	13
North Sydney	.....	1	4	.....	.....	.....	5
Vancouver	.....	.....	1	.....	.....	3	4
Victoria	1	1	2	.....	.....	.....	4
Totals	10	33	197	10	1	12	263

The table below shows, by ports, the specific mental and physical conditions for which the above persons were medically certified:—

Condition	Quebec	Halifax	St. John	Montreal	North Sydney	Vancouver	Victoria	Totals
Section 3 *(a)*—								
Epilepsy	1	1	.....	.....	.....	.....	.....	2
Feebleminded	.....	.....	.....	.....	.....	.....	1	1
Insanity	4	.....	1	.....	.....	.....	.....	5
Previous insanity	.....	1	1	.....	.....	.....	.....	2
Section 3 *(b)*—								
Cancer	.....	.....	.....	.....	1	.....	.....	1
Gonorrhoea	6	6	.....	4	.....	.....	1	17
Lupus vulgaris	.....	1	.....	.....	.....	.....	.....	1
Psoriasis	.....	1	.....	.....	.....	.....	.....	1
Syphilis	.....	1	.....	.....	.....	.....	.....	1
Trachoma	7	3	1	.....	.....	.....	.....	11
Tuberculosis	.....	.....	.....	1	.....	.....	.....	1
Section 3 *(c)*—								
Absence of members	2	9	1	.....	2	.....	.....	14
Anaemia	1	.....	.....	.....	.....	.....	.....	1
Blood vessels, defects of	4	28	.....	.....	.....	.....	.....	32
Bones, diseases of	.....	1	.....	.....	.....	.....	.....	1
Cerebral hemorrhage	.....	.....	.....	.....	.....	1	.....	1
Chest conditions	2	1	.....	.....	.....	.....	.....	3
Cholecystitis	.....	1	.....	.....	.....	.....	.....	1
Chorea	.....	2	.....	.....	.....	.....	.....	2
Deafness	2	1	1	2	.....	.....	.....	6
Debility	.....	2	.....	.....	1	.....	.....	3
Deformities	5	16	.....	.....	.....	.....	.....	21
Eczema	.....	2	.....	.....	.....	.....	.....	2
Glandular conditions	3	.....	.....	.....	.....	.....	.....	3
Goitre	.....	6	.....	.....	.....	.....	.....	6
Heart conditions	5	9	.....	.....	.....	.....	.....	14
Hernia	4	9	1	1	.....	.....	.....	15
Hydrocele	.....	3	.....	.....	.....	.....	.....	3
Loss of power of members	3	1	.....	.....	1	.....	.....	5
Miscellaneous conditions	.....	2	.....	.....	.....	.....	1	3
Neurasthenia	1	.....	.....	.....	.....	.....	.....	1
Paralysis	1	.....	.....	1	.....	.....	1	3
Poor physique	1	2	.....	.....	.....	.....	.....	3
Pregnancy, illegitimate	1	.....	.....	.....	.....	.....	.....	1
Presenility	.....	1	.....	.....	.....	.....	.....	1
Senility	.....	8	.....	.....	.....	.....	.....	8
Vision, defective	2	42	.....	.....	.....	.....	.....	44
Section 3 *(k)*—								
Constitutional phychopathic inferiority	6	4	.....	.....	.....	.....	.....	10
Section 3 *(l)*—								
Chronic alcoholism	1	.....	.....	.....	.....	.....	.....	1
Section 3 *(m)*—								
Deformities	2	.....	.....	.....	.....	.....	.....	2
Gas poisoning	.....	.....	.....	4	.....	.....	.....	4
Hernia	1	.....	.....	.....	.....	.....	.....	1
Mentally defective	.....	.....	.....	.....	.....	3	.....	3
Speech, defects of	.....	2	.....	.....	.....	.....	.....	2
Totals	65	166	6	13	5	4	4	263

Immigrants arriving at Canadian ocean ports who require medical attention are detained in departmental hospitals until they are fit to travel. For this service the respective steamship companies are charged at the following per diem rates:—

Sick, including minor infectious diseases	Infectious diseases contacts not confined to bed, including persons accompanying the sick		
	Adults	Children	
		Under 10 years of age	Under 1 year of age
$3.00	$2.00	$1.00	Free

The following table indicates the reasons for detention at the respective ports. It includes the cases detained for medical observation, also the minor infectious diseases—measles, chicken-pox, etc.—treated at the Savard Park Immigration Hospital, Quebec, and the Rockhead Immigration Hospital, Halifax. At the port of St. John, minor infectious diseases are treated at the Quarantine Hospital on Partridge Island.

Cause of detention	Quebec	Halifax	St. John	Montreal	Vancouver	Totals
Abscesses	5	12	1			18
Acne		1				1
Adenitis	2	5				7
Alcoholism	1				1	2
Anaemia	1					1
Appendicitis	2	1				3
Arthritis	1					1
Asthenia	5					5
Athrepsia	1					1
Bilious attacks	1					1
Blepharitis		1				1
Boils	10	5				15
Bronchitis	6	16	3		1	26
Bronchial catarrh		1				1
Broncho-pneumonia	7					7
Carbuncles	1	1				2
Catarrh	1					1
Cellulitis	1	1				2
Chickenpox	28	8				36
Childbirth	5	4				9
Colds, acute	13					13
Colitis	1					1
Conjunctivitis	20	9	2		3	34
Constipation	6					6
Contusions	2		1			3
Coryza	1		2			3
Cysts		1				1
Debility		1				1
Dermatitis	1	1	1			3
Diarrhoea	1					1
Diphtheria	2					2
Eczema	3	5	1			9
Enteritis	2					2
Erysipelas	2	3				5
Erythema		1				1
Folliculitis	1					1
Fractures	6	3				9
Furunculosis		12				12
Gastric disturbance	2					2
Gastro enteritis		2				2
German measles	3					3
Gonorrhoea	1					1
Haemorrhage		1				1
Hemiplegia	1					1
Hernia			1			1

Cause of detention	Quebec	Halifax	St. John	Montreal	Vancouver	Totals
Herpes	2	1				3
Impetigo	15	34				49
Infections	4	3	1			8
Influenza	11	6	2			19
Injuries		19				19
Intestinal toxemia		1				1
Jaundice	2					2
Keratitis	1					1
Laryngitis	1	1				2
Lymphadenitis		2				2
Marasmus	1					1
Mastitis		1				1
Measles	80	45		1		126
Meningitis	1	1				2
Miscarriage	1	1				2
Mumps	7	6			1	14
Nephritis		1				1
Neuritis		1				1
Observation—						
Chest	2					2
Chickenpox	9					9
Diphtheria	8	1				9
Epilepsy	1					1
Erysipelas	1					1
Eyes		2	4			6
General	6	24	1			31
German measles	3					3
Heart	1					1
Lungs		1				1
Measles	7					7
Mental	2	1				3
Pregnancy		1				1
Scalp	2					2
Scarlet fever	5					5
Temperature	3					3
Throat	4					4
Ophthalmia	1					1
Otitis media	7	3	2			12
Paronychia		1				1
Pediculi		1				1
Pericarditis		1				1
Peritonitis		1				1
Pharyngitis	1	1				2
Pneumonia	4	12	3		1	20
Pyelitis	1					1
Pyrexia		26	2			28
Refusing vaccination	9					9
Retention of urine	1					1
Rheumatism	2					2
Ringworm	3	8	1			12
Scabies		12				12
Scalds	2	1				3
Scarlet fever	5	12		1		18
Seasickness		13				13
Septic wounds	9	5				14
Sprains	7	1				8
Stye	1					1
Sycosis		1				1
Syncope		1				1
Synovitis	1	1	1			3
Tonsillitis	22	9	4			35
Toxic rash	1					1
Tracheitis		1				1
Trachoma, cicatrized	1					1
Ulcers	3	3	1			7
Urethritis		1				1
Urticaria	1					1
Vaccinia	1					1
Worms		2				2
Wounds, various	5					5
Totals	414	365	34	2	7	822

Immigrants arrive at ocean ports from time to time with physical defects which are not considered sufficiently serious to justify their certification as "prohibited" of entry under section 3 of the Immigration Act. A medical record is kept of such cases, however, for possible future reference.

CASES RECORDED AS HAVING MINOR DEFECTS

Quebec	20
Halifax	26

DEPORTATIONS FROM CANADA, AFTER ADMISSION ON ACCOUNT OF PHYSICAL AND MENTAL DEFECTS

During the fiscal year, a total of 602 persons who, not having been in this country a sufficient length of time to obtain Canadian domicile, were deported from Canada on account of becoming public charges due to mental or physical defects, were examined and reported upon by medical officers of the department stationed at the port of Montreal.

LABORATORY OF HYGIENE

As in the past, considerable co-operative work has been carried on with the Food and Drugs Laboratory in the bacteriological examination of food-stuffs, and in determining the phenol coefficient potency of a variety of coal-tar disinfectants. Assistance has been given to the sanitary engineer in dealing with the bacteriological purity of drinking waters as used on steamship lines.

The eastern chain of quarantine laboratories has been inspected and all apparatus and stores kept in a ready state for emergencies, in regard to laboratory diagnosis of any of the major quarantinable diseases.

A sanitary survey of clam-bed areas along the north shore of Nova Scotia, for a distance of about 96 miles, was undertaken so that licences could be issued to fishermen exporting their product to the United States market.

In conformity with the Regulations of the Food and Drugs Act, R.S. 1927, inspections were made of nine Canadian and two American manufacturing establishments engaged in turning out biological products coming under Parts II and III of the Act. Ultimately, of these only one Canadian establishment was refused a licence.

The laboratory is now furnishing to all manufacturers, who apply, standard preparations of digitalis, ergot and pituitrin. To this list will shortly be added ouabain.

Sterility tests have been undertaken of manufactured biological preparations designed for injection, and some research work of a practical nature has been completed on the gonococcus.

Potency tests have been carried out on smallpox virus, and on diphtheria toxin, toxoid and antiserum in regard to preparations on the market.

In conjunction with the Supervising Architect, plans have been drawn up for the erection of a breeding-house for laboratory animals, which should be completed in the fall of 1929.

Papers by the staff have been read and published upon infections of the human subject by *Brucella abortus*, and on the dangers attending the use of unpasteurized milk.

DIVISION OF VENEREAL DISEASE CONTROL

The work in connection with venereal disease control is progressing ever more satisfactorily, particularly with regard to the number of patients attending the clinics and the increased willingness exhibited by the patients to conscientiously follow out the treatment until a cure has been achieved.

Both the moderate increase over last year in number of patients treated at the various clinics and also in the total number of treatments given are attributable, not to an increased incidence in venereal disease, but to an increased use of the clinics, due to the better education of the public. Most workers in this line agree that the most effective form of education arises out of the intimate talks between patient and clinician, and that as a direct result of these talks not only does the patient remain under treatment until the doctor can conscientiously discharge him, but the patient advises needy friends of the advantages of clinic treatment.

This has been particularly noted in connection with women patients who are naturally so averse to seeking medical aid for venereal disease. The nurses attached to the clinics carry out a follow-up service with regard to the women patients and, as a result of the friendly professional relationship between nurse and patient, the latter is prevailed upon to remain under treatment longer than she otherwise would, and through one patient the nurse frequently gets in touch with another who is then persuaded to obtain clinic treatment.

It is generally conceded that the friendly "personal touch" obtaining in an efficient clinic staff is a more efficacious form of education than lectures or literature propaganda, although the latter have their place as well in the general campaign against the evil of venereal disease.

Compulsory treatment of infected individuals confined in jails, penitentiaries, etc., is another feature which is progressing satisfactorily in the general scheme of venereal disease control.

During the past year there has been a marked improvement in co-operation on the part of the general practitioners with the provincial health authorities as regards reporting the number of venereal disease cases under private treatment. This is very encouraging and it is hoped that very soon this co-operation will be such as to make possible the compilation of reliable statistics, yearly comparisons of which will indicate the variance in venereal disease incidence throughout the counttry.

The total number of new cases of venereal diseases admitted to clinics for treatment for the calendar year 1928 was approximately, as follows:—

Syphilis	7,666
Gonorrhœa	10,938
Chancroid	369
Total	18,973

Total number of treatments administered during same period of time, 528,898.

Total number of Laboratory Examinations during same period of time, 72,703.

The provincial Government expenditure in connection with venereal disease control are augmented by the Federal Government grant of $100,000, allotted as follows:—

	Amount
Alberta	$ 6,504 21
British Columbia	5,798 23
Manitoba	6,743 67
New Brunswick	4,287 22
Nova Scotia	5,790 00
Ontario	32,425 93
Prince Edward Island	979 47
Quebec	26,098 47
Saskatchewan	8,372 80
Department of National Health for administrative purposes	3,000 00
Total	$ 100,000 00

CHILD WELFARE DIVISION

MATERNAL WELFARE

In several provinces maternal mortality is now reported to be somewhat lower than it was in the fifty-ninth year of Confederation. Special Committees on Maternal Welfare were appointed by the Canadian Medical Association, the Manitoba Medical Association, the Thunder Bay Medical Society, the Academy of Medicine, Toronto, the Medical Association of Swift Current, Sask., and other medical bodies. The Maternal Mortality Committee of Manitoba Medical Association did much work during the year and the activities of this committee were no doubt largely responsible for the marked decrease in maternal mortality which has taken place in Manitoba. The secretary of the Medical Association, Swift Current, Sask., reports that, "The members of our association are doing all in their power to broadcast among the laity the necessity of regular examinations of urine and measurement of blood pressure during pregnancy. A report from British Columbia states that maternal welfare is receiving great attention from the medical profession in that province.

In building new hospitals, special attention has been given to maternity wards, and to equipment for obstetrical work.

The London Child Welfare Association and other voluntary organizations in different places devoted special meetings to maternal welfare. The Special Committee on Maternal Welfare appointed by the National Council of Women of Canada issued questionnaires and letters in January which have aroused much interest. Ten thousand copies were issued. The committee will report at the annual meeting in June. The Federated Women's Institutes of Canada are continuing their work under the direction of their Maternal Welfare Committee, which is to present a report at the biennial meeting in June. The following is extracted from the Annual Report of the Committee on Health and Child Welfare, Ontario Women's Institutes, November, 1928:—

"Some years ago we undertook to get 'The Canadian Mother's Book' in every home, and I believe we are going to succeed. Several branches reported that they had called on every woman in their section and given her 'The Canadian Mother's Book'. Others report having given these out in response to the roll call. Last year we said we would make our slogan, 'Make Maternity Safe in Ontario' and great progress has been made. One report says 'We got the Report of the Department of Health of Canada on 'Maternal Mortality in Canada' and as a result of studying it we raised the funds to provide proper nursing care for a poor woman in our district."

The subject of maternal mortality was brought before the United Farmers of Manitoba at their annual meeting in Brandon on January 11 in a report presented by the convener of the Committee on Public Health and Social Service of the United Farm Women of Manitoba. The following is extracted from the report: "In Brandon and other parts of Manitoba efforts have been made to instil into the public mind that maternal welfare is of importance to Canada as a whole." The United Farm Women of Ontario passed the following resolution at their annual convention at Toronto, December, 1928:—

Whereas the chief cause of our appalling death rate of mothers at childbirth is economic, the remedy of which is slow, and

Whereas we are fully conscious many methods can be used to lessen the calamity, and

Whereas the united farm women of Ontario are in need of information on this subject, and

Whereas scientific knowledge on prenatal care is not available, and

Whereas time and study given to obstetrics in medical training could be increased, and

Whereas governments do not assume financial care of expectant mothers,

Therefore be it resolved that the United Farm Women secure and study the very interesting pamphlet "Maternal Mortality" issued by the Department of Health, Ottawa; that this convention urge the Dominion Government to set up a research branch on

maternal mortality in connection with the Department of Health and make the scientific knowledge thus found available to all by literature, pictures, speakers, etc., and co-operate with women's and men's clubs, church societies and social bodies; and that the Dominion and provincial governments set up a maternal insurance or allowance board, half or more of the cost to be met by the federal Government, the administration to be left with the province and, similarly, to subsidize doctors in rural, remote, and thinly populated regions and that this convention draw to the attention of the provincial Government and the medical colleges the great need for more scientific and intensive training of medical students in obstetrics and a great need of experience before they are allowed to practise, believing that mothers' lives are far too precious to be experimented with.

The statistics of maternal mortality in the work of the Victorian Order of Nurses for the year 1928 were placed before the deputy minister on February 28 by the chief superintendent of the order. They are in part as follows: Total obstetrical cases, 12,920; maternal deaths, 22; maternal death rate per 1,000 obstetrical cases, 1·6.

National Health Publications No. 37, 38 and 39, being the three reports on Maternal Mortality in Canada were reprinted during the year on account of the large demand for them.

THE PRE-SCHOOL CHILD

Increased attention has been given during the year to the health and welfare of the pre-school child. Medical organizations such as the Academy of Medicine, Toronto, and others have discussed this subject. Further attention and action is advisable.

CHILDREN NEEDING SPECIAL CARE AND EDUCATION

General interest has been shown during the year in the welfare of children who from any reason, mental or physical, need special education, by the Rotary, and other Service Clubs, the Ontario Association for Crippled Children, the Shriners, the Children's Hospitals, the provincial Departments of Education and the general public.

CHILD WELFARE WORK FOR CHILDREN NOT IN THEIR OWN HOMES

National Health Publication No. 40 in the National Series of "The Little Blue Books" which contains a statement of the Modern Principles of Child Welfare Work for Children Not In Their Own Homes as agreed on by the provincial superintendents of such work, also a Directory of the Government officials and voluntary organizations concerned, was issued in November, 1928. In the preparation of this publication co-operation was received from the Department of Immigration and Colonization, from the provincial authorities and from the voluntary associations.

The Executive Committee of the National Council of Women of Canada passed a resolution drawing attention to this publication and stating that in their opinion further action and co-operation is necessary. Women's Institutes and other organizations also showed interest in this subject. The entire edition of the publication was exhausted by January, 1929.

CORRESPONDENCE CLASSES AND SCHOOL CARS

Correspondence Classes are now carried on in the provinces of Nova Scotia, Ontario, Manitoba, Alberta and British Columbia. The provincial superintendents of these classes forwarded at our request in January, 1929, lists of the names and addresses of parents whose children are enrolled in these classes and letters have been sent to the parents enclosing requests cards for our publications and offering to send them, if desired. This plan has proved successful.

In northern Ontario two additional school cars are now in service making a total of four school cars in constant operation there. The success of this work

has been assured from the beginning and the benefits of the system have not been confined to education but include health and social welfare. We have had the pleasure of co-operating with the principals of the four northern Ontario school cars during the year.

ESKIMO CHILD WELFARE

Continued co-operation has again been requested and promised by the Department of the Interior. There are now only about seven thousand Eskimos left alive. Each month of the official year something has been done to point out to those responsible that a new policy is required to save the Eskimo from extermination. The mineral and other wealth of the Arctic and sub-Arctic is realized more than ever but the fact that without the aid of the Eskimo this wealth is not available does not seem to be realized.

JUVENILE DELINQUENTS ACT

A number of important amendments to this Act were brought to the attention of the Minister of Justice by the Canadian Council on Child Welfare and other voluntary societies for presentation to Parliament during the session of 1929.

JUVENILE ADULTS IN PENITENTIARIES

Attention was given to this subject during every month in the official year and at an interview with Mr. Lapointe, Minister of Justice, on Tuesday, March 26, 1929, the minister stated that he hoped to bring this subject before the House of Commons this session.

FAMILY DESERTION

Efforts have been made in co-operation with voluntary societies to advance public opinion on this subject so that adherence to the legislation passed by the Imperial House of Commons might be given by the provinces and by the Dominion, if and when so desired.

CHILD LABOUR

Efforts have also been made towards securing the adherence of the provinces to the Geneva Child Labour Conventions so that Canada might become a signatory to these.

FAMILY RE-UNION SCHEME

Additional opportunities of co-operating with the Department of Immigration and Colonization occurred during the year. The names and addresses of mothers and children coming to Canada under the Family Re-Union Scheme have been received and a letter has been sent to each mother welcoming her to Canada and enclosing a request-card for "The Little Blue Books." A good many answers have been received to these letters. Similar letters have been sent for some years to unaccompanied women coming out to Canada to be married.

Three visits have been paid, by invitation, to the Red Cross port nurseries, where mothers and children from overseas are welcomed.

VOLUNTARY SOCIETIES

Constant co-operation has been maintained during the year, not only with the voluntary societies already mentioned but also with the Canadian Council on Child Welfare, the Canadian Association of Child Protection Officers and the National Council of Education.

CONFERENCE OF VOLUNTARY HEALTH SOCIETIES

By request of certain voluntary societies and at the invitation of the deputy minister, representatives of six of these societies attended an informal conference in the department on February 28, and took part in a discussion as to the advisability of a general conference of Voluntary Societies and the agenda for the same. It is expected that the conference will take place at an early date.

FIFTH ENGLISH-SPEAKING CONFERENCE ON MATERNITY AND CHILD WELFARE, LONDON, ENGLAND

At the request of the National League for Health, Maternity and Child Welfare, made through the High Commissioner for Canada, a brief statement was prepared in co-operation with the provincial authorities as to child welfare in Canada.

LEAGUE OF NATIONS—TUBERCULOSIS

At the request of a committee of the League of Nations information was collected from the provincial authorities as to tuberculosis-infection in childhood.

WORLD CONFERENCE OF EDUCATION ASSOCIATIONS IN GENEVA

At the request of the officials of this conference, much time was devoted to securing from the provincial authorities information as to school health work in Canada. This information was duly arranged and forwarded.

DIVISION OF HOSPITALIZATION AND SANITATION

HOSPITALIZATION

Tuberculosis Sanatoria.—A limited edition of the publication prepared by the division, embracing this phase of hospitalization, i.e., "Tuberculosis, Hospitalization in General and Particular," is now complete. This compilation is in three volumes and consists of 800 pages, together with over 250 illustrations. The work includes history; education; sanatoria; heliotherapy; occupational therapy; preventive medicine; rehabilitation of ex-tuberculous patients; preventoria; diet; and European notes covering the many institutions on that Continent. The publication will be of great value to universities, provincial health officers, and the medical profession generally.

Inquiries are increasing in numbers for the data of "Standard Tuberculosis Units for General Hospitals."

General Hospitals.—The gesture offered in the motion passed at the Annual Meeting of the Royal Architectural Institute of Canada, which motion recommends to the Canadian Medical Association that lectures should be given by architects versed in hospitalization to university graduates taking medicine, is pertinent, inasmuch as when it is realized that approximately one million dollars per day are being spent in hospital construction at the present time, obviously educational measures should be taken whereby the public might benefit to the full in any expenditure attained from the public purse, for such purpose. It is felt by those competent to give expression that there is a growing feeling among the members of the medical profession that this phase of hospitalization should be the subject of study—one might say intensive study—by those associated in human welfare, including members of the medical and nursing professions, sociologists, engineers and architects, and only by such means, it is the opinion, will the grievous blunders being made day by day be averted.

Insulation against climatic conditions and noise has been, and is being, sadly neglected in the construction of hospitals. It will be safe to say that not five per cent of the hospitals being constructed to-day are either properly insulated or sound-proof.

With the common use of electricity in hospitals, dangers have increased, and one of the most outstanding may be found in the operating department. The danger of lack of safeguards, caused by combustible anæsthetics, electric cauteries; radio knives; high frequency machines and X-ray fluoroscopic equipment is not fully recognized, and, without exception, safe practice dictates the absence of such equipment in the presence of combustible anæsthetics. The electric cautery, perhaps, presents a difficult problem, as its use is often imperative. However, this hazard might be overcome by resorting to non-combustible and local anæsthetics as far as possible, when the use of the electric cautery is demanded. Many accidents have been caused by static electricity.

Therefore, since the hospital operating room, of all places, should be such as to afford maximum security and protection, safeguards should be adopted. Each operating room should be provided with a system of humidification, the humidity in no case to be less than 60 per cent. Since the proper degree of humidity might vary considerably, it should be determined by actual tests under working conditions.

The cylinder or other containers of combustible anæsthetics, mounted on portable trucks, should be so arranged that the complete unit is properly grounded.

Door plates at entrances and exits of operating rooms should be thoroughly grounded, as also any piping system used for conducting a combustible anæsthetizing gas into the operating room.

With the vast development now taking place throughout the Dominion, it behooves everyone interested in hospitals to take up the study of hospital economics, and further to realize the necessity of a medium whereby collation of material may be available.

Hospitals in Arctic.—The buildings designed by the division for use of the medical officers in the Arctic have, according to the chief medical officer, who has occasion to work and live in them, proved eminently satisfactory. The results obtained through correct insulation against climatic conditions have effected a saving of over fifty per cent of fuel, and, in consequence thereof, it can be claimed with confidence that the type of construction in these buildings has set a standard which will be followed by other departments of the Government, whose personnel, through their activities, have occasion to reside in these regions.

Radio Talks.—Radio talks were given by the chief of the division from time to time, emphasizing that better means of hospitalization were being demanded in Canada to-day than in any other period of its history and, further, that members of the faculties of the different universities were spending much time and energy in research work of the many phases involved in the study thereof, more particularly sound transmission, sound absorption and light.

The one outstanding fact that interests most people, whether they pay any attention to the hospital trend or not, is that the cost of being sick is not getting any less. So far as hospitals are concerned, the answer to that question lies in the development of facilities and service that will tend to shorten the time of hospital bed occupancy per patient, and to spread knowledge on " how to keep out of the hospital." The more hospitals become health centres instead of disease centres then the quicker will control be attained in the cost of being sick.

Immigration Hospitals.—The new unit of the Immigration Hospital, Quebec, P.Q., is now in operation. There is a capacity of fifty-two beds arranged for the segregation of infectious and non-infectious cases.

The building is insulated and of fireproof construction. The patients' rooms have been so planned that the benefit of the sun's rays is obtained throughout. The orientation of the solaria and recreation rooms provides amenities valuable in therapy. The modern trend of sanitation in hospitals, more particularly the equipment for the use of ambulatory cases is in evidence at this unit, since shower baths are provided, as well as tubs, and the diet kitchens are fitted with sterilizer sinks, thereby avoiding possibilities of cross-infection through careless technique. Special attention has been given to the means of escape in case of fire, which in the past has been neglected in so many cases, with a consequent loss of life.

It is the accepted opinion that this unit of the medical immigration service is complete in every respect and a distinct advance in the hospitalization and treatment of sick immigrants entering the Dominion at the port of Quebec.

SANITATION

Domestic water supplies and sewage treatment in rural districts, it is gratifying to note, have become a topic of deep interest wherever dwellers are in touch with local Medical Officers of Health. The District Medical Health Officer, St. John, N.B., advised the department that he found publications Nos. 1 and 17, covering these subjects, very useful and in considerable demand by people in the country districts, and further, offered the suggestion that wider distribution should be made through the Department of Agriculture, since that department was closer in touch with the farmers throughout the Dominion. In his opinion, a great deal of benefit would result, if the people were aware of the publications; this in spite of the fact that many thousand individual applications are made from time to time for this data. The Department of Agriculture, to meet this situation, have included in their publication "Seasonable Hints," notice of the publications, with the result that the demand has increased in leaps and bounds, which must prove of great benefit to the health of the people.

Pasteurization of milk is being practised in greater volume year by year throughout the Dominion. Milk producers, as well as consumers, are beginning to realize that the value of such process is incalculable as a safeguard in the prevention of certain diseases. Although the question of desirable temperature has, and is being criticized day by day, yet it still is the well considered opinion that that recommended in the department's brochure No. 36, under the caption of "Pasteurization of Milk for Small Communities," is the safest in practice wherever milk is handled in this way for human consumption. The publication above referred to is now in the second edition, the demand being so great.

FINANCIAL STATEMENTS

EXPENDITURE, BY SERVICES, FOR THE FISCAL YEAR 1928-29

Service	Gross expenditure	Refunds	Net expenditure
	$ cts.	$ cts.	$ cts.
Civil Government Salaries	182,421 95	19 60	182,402 35
Civil Government Contingencies	63,953 97	4,131 77	59,822 20
Food and Drugs	97,372 15	1,390 90	95,981 25
Opium and Narcotic Drugs	32,212 42	966 57	31,245 85
Proprietary or Patent Medicines	2,772 85	.....	2,772 85
Laboratory of Hygiene	5,273 67	317 23	4,956 44
Pollution of Inland Waters	12,034 01	40 29	11,993 72
Marine Hospitals, etc	210,586 93	587 13	209,999 80
Quarantine	181,275 19	1,430 45	179,844 74
Leprosy	17,073 10	.....	17,073 10
Public Works Health Act	3,272 55	190 39	3,082 16
Immigration Medical Inspection	270,918 66	2,771 25	268,147 41
Veneral Diseases	98,905 20	.....	98,905 20
Gratuities, Civil Service Act, Section 56	1,385 00	.....	1,385 0
St. John Ambulance Association	5,000 00	.....	5,000
Victorian Order of Nurses	10,000 00	.....	10,000
Canadian Council on Child Welfare	10,000 00	.....	10,000
Canadian Dental Hygiene Council	5,000 00	.....	5,00
Canadian Social Hygiene Council	20,000 00	.....	20,0
Canadian Tuberculosis Association	25,000 00	.....	25,
Canadian National Committee for Mental Hygiene	20,000 00	.....	20
	1,274,457 65	11,845 58	1,2

REVENUE COLLECTED FROM VARIOUS SOURCES FOR THE FISCAL YEAR 1928-29

Service	Total Revenue	Refunds	Net Revenue
	$ cts.	$ cts.	$ cts.
"A"—Food and Drugs	9,048 57	64 52	8,984 05
"B"—Opium and Narcotic Drugs	10,416 00	1,156 15	9,259 85
"C"—Patent Medicines	7,445 30	665 30	6,780 00
"D"—Sick Mariners' Dues	237,549 45	741 50	236,807 95
"E"—Casual Revenue	53,362 97	93 66	53,269 31
	317,822 29	2,721 13	315,101 16

"A"—FOOD AND DRUGS NET REVENUE, 1928-29

Province	Licenses	Analysis Fees	Penalties	Costs	Total
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Nova Scotia	.....	10 00	25 00	10 00	45 00
New Brunswick	.....	10 00	.....	.....	10 00
Quebec	65 00	.....	850 00	268 00	1,183 00
Ontario	55 00	4,020 00	2,375 00	956 05	7,406 05
Manitoba	.....	55 00	100 00	20 00	175 00
Saskatchewan	.....	.....	25 00	10 00	35 00
British Columbia	.....	60 00	25 00	10 00	95 00
Foreign	35 00	.....	.....	.....	35 00
	155 00	4,155 00	3,400 00	1,274 05	8,984 05

"B"—OPIUM AND NARCOTIC DRUGS NET REVENUE, 1928-29

Province	Business Licenses	Import Licenses	Export Licenses	Penalties	Seizures	Total
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Nova Scotia	60 00			20 00		80 00
New Brunswick	80 00					80 00
Quebec	1,055 00	275 00	15 00	1,476 30		2,821 30
Ontario	1,075 00	95 00	20 00	1,900 00	25 00	3,115 00
Manitoba	275 00					275 00
Saskatchewan	55 00			900 00		955 00
Alberta	80 00			275 00		355 00
British Columbia	270 15			1,283 40		1,553 55
Foreign	25 00					25 00
	2,975 15	370 00	35 00	5,854 70	25 00	9,259 85

"C"—PATENT MEDICINES NET REVENUE, 1928-29

Province	Penalties	Registration Fees at $2.00 each	License Fees at $1.00 each	Total
	$ cts.	$ cts.	$ cts.	$ cts.
[illegible] Scotia		30 00	75 00	105 00
[illegible] runswick		40 00	155 00	195 00
[illegible] Edward Island			7 00	7 00
[illegible]		354 00	1,487 00	1,841 00
[illegible]	175 00	626 00	2,371 00	3,172 00
[illegible]		50 00	191 00	241 00
[illegible] katchew.		18 00	30 00	48 00
[illegible] berta		22 00	57 00	79 00
[illegible] ritish Columbia		24 00	136 00	160 00
[illegible] oreign		144 00	788 00	932 00
	175 00	1,308 00	5,297 00	6,780 00

"D"—SICK MARINERS' DUES REVENUE, 1928-29

Province	Total	Refunds	Net
	$ cts.	$ cts.	$ cts.
Nova Scotia	52,919 40	109 74	52,809 66
New Brunswick	21,493 42	91 08	21,402 34
Prince Edward Island	1,151 14	4 00	1,147 14
Quebec	68,117 38	242 14	67,875 24
British Columbia	93,868 11	294 54	93,573 57
	237,549 45	741 50	236,807 95

"E"—CASUAL REVENUE, 1928-29

	Net total
	$ cts.
Fumigation of ships	27,298 21
Hospital care of passengers	23,738 00
Department of National Revenue use of launch *Evelyn*	1,800 00
Refunds of previous years' expenditure	431 35
Sundry sales	1 75
	53,269 31